HITACHI

INSTALLATION AND OPERATION MANUAL

YUTAMPO SERIES
INDOOR UNIT

MODELS
TAW-(190/270)RHC

EN INSTALLATION AND OPERATION MANUAL
ES MANUAL DE INSTALACIÓN Y FUNCIONAMIENTO
DE INSTALLATIONS- UND BETRIEBSHANDBUCH
FR MANUEL D'INSTALLATION ET DE FONCTIONNEMENT
IT MANUALE D'INSTALLAZIONE E D'USO
PT MANUAL DE INSTALAÇÃO E FUNCIONAMENTO
DA INSTALLATIONS- OG BETJENINGSVEJLEDNING
NL INSTALLATIE- EN BEDIENINGSHANDLEIDING
SV INSTALLATION- OCH DRIFTHANDBOK
EL ΕΓΧΕΙΡΙΔΙΟ ΕΓΚΑΤΑΣΤΑΣΗΣ ΚΑΙ ΛΕΙΤΟΥΡΓΙΑΣ

BG РЪКОВОДСТВОТО ЗА ИНСТАЛИРАНЕ И ЕКСПЛОАТАЦИЯ
CS NÁVODEM K INSTALACI A OBSLUZE
HU TELEPÍTÉSI ÉS ÜZEMELTETÉS ÚTMUTATÓJÁNAK
LT MONTAVIMO IR NAUDOJIMO VADOVĄ
PL INSTRUKCJA INSTALACJI I OBSŁUGI
RO MANUALUL DE INSTALARE ŞI UTILIZARE
SK NÁVOD NA PREVÁDZKU A INŠTALÁCIU
UK ПОСІБНИКА З МОНТАЖУ ТА ЕКСПЛУАТАЦІЇ

Cooling & Heating

PMML0544 rev.4 - 02/2023

English

Specifications in this manual are subject to change without notice in order that Hitachi may bring the latest innovations to their customers.
Whilst every effort is made to ensure that all specifications are correct, printing errors are beyond Hitachi's control; Hitachi cannot be held responsible for these errors.

Español

Las especificaciones de este manual están sujetas a cambios sin previo aviso a fin de que Hitachi pueda ofrecer las últimas innovaciones a sus clientes.
A pesar de que se hacen todos los esfuerzos posibles para asegurarse de que las especificaciones sean correctas, los errores de impresión están fuera del control de Hitachi, a quien no se hará responsable de ellos.

Deutsch

Bei den technischen Angaben in diesem Handbuch sind Änderungen vorbehalten, damit Hitachi seinen Kunden die jeweils neuesten Innovationen präsentieren kann.
Sämtliche Anstrengungen wurden unternommen, um sicherzustellen, dass alle technischen Informationen ohne Fehler veröffentlicht worden sind. Für Druckfehler kann Hitachi jedoch keine Verantwortung übernehmen, da sie außerhalb ihrer Kontrolle liegen.

Français

Les caractéristiques publiées dans ce manuel peuvent être modifiées sans préavis, Hitachi souhaitant pouvoir toujours offrir à ses clients les dernières innovations.
Bien que tous les efforts sont faits pour assurer l'exactitude des caractéristiques, les erreurs d'impression sont hors du contrôle de Hitachi qui ne pourrait en être tenu responsable.

Italiano

Le specifiche di questo manuale sono soggette a modifica senza preavviso affinché Hitachi possa offrire ai propri clienti le ultime novità.
Sebbene sia stata posta la massima cura nel garantire la correttezza dei dati, Hitachi non è responsabile per eventuali errori di stampa che esulano dal proprio controllo.

Português

As especificações apresentadas neste manual estão sujeitas a alterações sem aviso prévio, de modo a que a Hitachi possa oferecer aos seus clientes, da forma mais expedita possível, as inovações mais recentes.
Apesar de serem feitos todos os esforços para assegurar que todas as especificações apresentadas são correctas, quaisquer erros de impressão estão fora do controlo da Hitachi, que não pode ser responsabilizada por estes erros eventuais.

Dansk

Specifikationerne i denne vejledning kan ændres uden varsel, for at Hitachi kan bringe de nyeste innovationer ud til kunderne.
På trods af alle anstrengelser for at sikre at alle specifikationerne er korrekte, har Hitachi ikke kontrol over trykfejl, og Hitachi kan ikke holdes ansvarlig herfor.

Nederlands

De specificaties in deze handleiding kunnen worden gewijzigd zonder verdere kennisgeving zodat Hitachi zijn klanten kan voorzien van de nieuwste innovaties.
Iedere poging wordt ondernomen om te zorgen dat alle specificaties juist zijn. Voorkomende drukfouten kunnen echter niet door Hitachi worden gecontroleerd, waardoor Hitachi niet aansprakelijk kan worden gesteld voor deze fouten.

Svenska

Specifikationerna i den här handboken kan ändras utan föregående meddelande för att Hitachi ska kunna leverera de senaste innovationerna till kunderna.
Vi på Hitachi gör allt vi kan för att se till att alla specifikationer stämmer, men vi har ingen kontroll över tryckfel och kan därför inte hållas ansvariga för den typen av fel.

Ελληnika

Οι προδιαγραφές του εγχειριδίου μπορούν να αλλάξουν χωρίς προειδοποίηση, προκειμένου η Hitachi να παρέχει τις τελευταίες καινοτομίες στους πελάτες της.
Αν και έχει γίνει κάθε προσπάθεια προκειμένου να εξασφαλιστεί ότι οι προδιαγραφές είναι σωστές, η Hitachi δεν μπορεί να ελέγξει τα τυπογραφικά λάθη και, ως εκ τούτου, δεν φέρει καμία ευθύνη για αυτά τα λάθη.

български

Спецификациите в това ръководство подлежат на изменения без известяване, така че Hitachi да може да предоставя на своите клиенти последните иновации.
Полагат се всички усилия, за да се гарантира, че всички спецификации са коректни, но печатните грешки са извън обсега на контрола на Hitachi и Hitachi не може да носи отговорност за тези грешки.

Čeština

V zájmu toho, aby společnost Hitachi mohla svým zákazníkům nabízet nejnovější inovace, se specifikace v tomto návodu mohou od skutečnosti lišit, a to bez předchozího upozornění.
Přestože vynakládáme maximální úsilí, aby byly všechny specifikace správné, tiskové chyby nespadají pod kontrolu společnosti Hitachi, která za takové chyby nenese odpovědnost.

Magyar nyelv

Az alábbi kézikönyvben foglalt előírások előzetes értesítés nélkül változhatnak, annak érdekében, hogy a Hitachi a legfrissebb újításokkal szolgálhasson ügyfelei számára.
Bár minden erőfeszítést megteszünk annak érdekében, hogy minden előírás helyes legyen, a nyomtatási hibák nem állnak a Hitachi ellenőrzése alatt; ezekért a hibákért a Hitachi nem tehető felelőssé.

Lietuvių

Šio vadovo specifikacijos gali būti pakeistos be išankstinio įspėjimo, kad Hitachi galėtų pateikti savo klientams paskutines naujoves.
Nors dedamos pastangos užtikrinant, kad visos specifikacijos būtų teisingos, Hitachi nekontroliuoja spausdinimo klaidų; Hitachi negali būti laikoma atsakinga už tokias klaidas.

Polski

Zamieszczone w niniejszej instrukcji obsługi dane techniczne mogą ulec zmianie bez uprzedniego powiadomienia ze względu na innowacyjne rozwiązania, jakie firma Hitachi nieustannie wprowadza z myślą o swoich klientach.
Mimo podejmowanych starań, aby zapewnić poprawność wszystkich podanych tutaj informacji, nie można wykluczyć zaistnienia błędów drukarskich, za które firma Hitachi nie ponosi żadnej odpowiedzialności.

Română

Specificațiile din acest manual pot fi modificate fără notificare prealabilă, pentru ca Hitachi să poată pune la dispoziția clienților noștri ultimele inovații.
Deși depunem toate eforturile pentru a ne asigura că toate specificațiile sunt corecte, erorile de tipărire depășesc controlul Hitachi; Hitachi nu poate fi tras la răspundere pentru aceste erori.

Slovenčina

Špecifikácie uvedené v tejto príručke sa môžu zmeniť bez predchádzajúceho upozornenia, pretože spoločnosť Hitachi chce svojim zákazníkom prinášať najnovšie inovácie.
Zatiaľ čo sa vynakladá maximálne úsilie na zabezpečenie toho, aby boli všetky špecifikácie správne, chyby tlače sú mimo kontroly spoločnosti Hitachi. Spoločnosť Hitachi nemôže niesť zodpovednosť za tieto chyby.

Українська

Специфікації цього посібника можуть бути змінені компанією Hitachi без попередження з метою ознайомлення клієнтів з останніми вдосконаленнями виробу.
Незважаючи на всі зусилля, спрямовані на те, щоб всі специфікації були правильними, компанія Hitachi не несе відповідальності за помилки друку, які не перебувають під її контролем.

⚠ CAUTION

This product shall not be mixed with general house waste at the end of its life and it shall be retired according to the appropriated local or national regulations in a environmentally correct way.
Due to the refrigerant, oil and other components contained in heat pump, its dismantling must be done by a professional installer according to the applicable regulations. Contact to the corresponding authorities for more information.

⚠ PRECAUCIÓN

Este producto no se debe eliminar con la basura doméstica al final de su vida útil y se debe desechar de manera respetuosa con el medio ambiente de acuerdo con los reglamentos locales o nacionales aplicables.
Debido al refrigerante, el aceite y otros componentes contenidos en la bomba de calor, su desmontaje debe realizarlo un instalador profesional de acuerdo con la normativa aplicable. Para obtener más información, póngase en contacto con las autoridades competentes.

⚠ VORSICHT

Dass Ihr Produkt am Ende seiner Betriebsdauer nicht in den allgemeinen Hausmüll geworfen werden darf, sondern entsprechend den geltenden örtlichen und nationalen Bestimmungen auf umweltfreundliche Weise entsorgt werden muss.
Aufgrund des Kältemittels, Öls und anderer Komponenten in der Wärmepumpe muss ihr Ausbau von einem professionellen Installateur entsprechend der anwendbaren Vorschriften durchgeführt werden. Für weitere Informationen setzen Sie sich bitte mit den entsprechenden Behörden in Verbindung.

⚠ ADVERTISSEMENT

Ne doit pas être mélangé aux ordures ménagères ordinaires à la fin de sa vie utile et qu'il doit être éliminé conformément à la réglementation locale ou nationale, dans le plus strict respect de l'environnement.
En raison du frigorigène, de l'huile et des autres composants que contient la pompe à chaleur, son démontage doit être effectué par un installateur professionnel conformément aux règlementations en vigueur.

⚠ AVVERTENZE

Indicazioni per il corretto smaltimento del prodotto ai sensi della Direttiva Europea 2011/65/EU e D.Lgs 4 marzo 2014 n.27
Il simbolo del cassonetto barrato riportato sull' apparecchiatura indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.
L'utente dovrà, pertanto, conferire l'apparecchiatura giunta a fine vita agli idonei centri di raccolta differenziata dei rifiuti elettronici ed elettrotecnici, oppure riconsegnarla al rivenditore al momento dell' acquisto di una nuova apparecchiatura di tipo equivalente.
L'adeguata raccolta differenziata delle apparecchiature dismesse, per il loro avvio al riciclaggio, al trattamento ed allo smaltimento ambientalmente compatibile, contribuisce ad evitare possibili effetti negativi sull' ambiente e sulla salute e favorisce il riciclo dei materiali di cui è composta l' apparecchiatura.
Non tentate di smontare il sistema o l'unità da soli poichè ciò potrebbe causare effetti dannosi sulla vostra salute o sull' ambiente.
Vogliate contattare l' installatore, il rivenditore, o le autorità locali per ulteriori informazioni.
Lo smaltimento abusivo del prodotto da parte dell'utente può comportare l'applicazione delle sanzioni amministrative di cui all'articolo 50 e seguenti del D.Lgs. n. 22/1997.

⚠ CUIDADO

O seu produto não deve ser misturado com os desperdícios domésticos de carácter geral no final da sua duração e que deve ser eliminado de acordo com os regulamentos locais ou nacionais adequados de uma forma correcta para o meio ambiente.
Por causa do refrigerante, do óleo e de outros componentes na bomba de calor, o desmantelamento deve ser realizado por um instalador profissional em conformidade com os regulamentos aplicáveis. Contacte as autoridades correspondentes para obter mais informações.

⚠ ADVASEL!

At produktet ikke må smides ud sammen med almindeligt husholdningsaffald, men skal bortskaffes i overensstemmelse med de gældende lokale eller nationale regler på en miljømæssig korrekt måde.
Da varmepumpen indeholder kølemiddel, olie samt andre komponenter, skal afmontering foretages af en fagmand i overensstemmelse med de gældende bestemmelser. Kontakt de pågældende myndigheder for at få yderligere oplysninger.

⚠ VOORZICHTIG

Dit houdt in dat uw product niet wordt gemengd met gewoon huisvuil wanneer u het weg doet en dat het wordt gescheiden op een milieuvriendelijke manier volgens de geldige plaatselijke en landelijke reguleringen.
Wegens de aanwezigheid van koelmiddel, olie en andere componenten in de warmtepomp moet het apparaat volgens de toepasselijke regelgeving door een professionele installateur worden gedemonteerd. Neem contact op met de betreffende overheidsdienst voor meer informatie.

⚠ FÖRSIKTIGHET

Det innebär att produkten inte ska slängas tillsammans med vanligt hushållsavfall utan kasseras på ett miljövänligt sätt i enlighet med gällande lokal eller nationell lagstiftning.
Eftersom värmepumpen innehåller kylmedel, oljor och andra komponenter, måste den demonteras av en behörig installatör i enlighet med gällande föreskrifter. Ta kontakt med ansvarig myndighet om du vill ha mer information.

⚠ ΠΡΟΣΟΧΗ

Σημαίνει ότι το προϊόν δεν θα πρέπει να αναμιχθεί με τα διάφορα οικιακά απορρίμματα στο τέλος του κύκλου ζωής του και θα πρέπει να αποσυρθεί σύμφωνα με τους κατάλληλους τοπικούς ή εθνικούς κανονισμούς και με τρόπο φιλικό προς το περιβάλλον.
Λόγω του ψυκτικού, του λαδιού και άλλων εξαρτημάτων που περιλαμβάνονται στην αντλία θέρμανσης, η αποσυναρμολόγησή του πρέπει να γίνει από εξουσιοδοτημένο επαγγελματία τεχνικό, σύμφωνα με τους ισχύοντες κανονισμούς. Για περισσότερες λεπτομέρειες, επικοινωνήστε με τις αντίστοιχες αρχές.

⚠ ВНИМАНИЕ

В края на своя технологичен живот този продукт не бива да се изхвърля заедно с общите битови отпадъци и трябва да се третира съгласно приетите местни или национални подзаконови нормативни актове по правилен от гледна точка на опазване на околната среда начин.
Поради охладителя, маслото и останалите компоненти, съдържащи се в затоплящата помпа, разглобяването му задължително се извършва от професионален техник съгласно приложимите подзаконови нормативни актове. За повече информация се свържете със съответните органи.

⚠ POZOR

Tento výrobek nesmí být na konci své životnosti likvidován v rámci běžného komunálního odpadu, nýbrž ekologickým způsobem v souladu s příslušnými místními nebo vnitrostátními předpisy.
Vzhledem k chladivu, oleji a dalším komponentům obsaženým v tepelném čerpadle musí jeho demontáž provádět odborný instalační technik v souladu s platnými předpisy. Více informací lze získat od příslušných orgánů.

⚠ FIGYELMEZTETÉS

Élettartama végén a termék az általános háztartási hulladékkal nem keverendő; ártalmatlanítását a vonatkozó helyi vagy nemzeti előírásoknak megfelelően, környezetvédelmi szempontból helyesen kell végezni.
A hőszivattyúban található hűtőfolyadék, olaj vés egyéb anyagok miatt ennek szétszerelését a vonatkozó előírásoknak megfelelően, szakembernek kell végeznie. További információért forduljon az illetékes hatósághoz.

⚠ ĮSPĖJIMAS

Šio produkto negalima maišyti su bendromis buitinėmis atliekomis jo gyvavimo ciklo pabaigoje. Jis turi būti išmetamas laikantis atitinkamų vietinių ar nacionalinių reglamentų aplinkai tinkamu būdu.
Dėl aušinimo medžiagos, alyvos ir kitų komponentų, esančių šilumos siurblyje, jo išmontavimą turi atlikti profesionalus montuotojas pagal galiojančias taisykles. Dėl detalesnės informacijos susisiekite su atsakingomis institucijomis.

⚠ OSTROŻNIE

Po zakończeniu okresu użytkowania produktu, nie należy go wyrzucać z odpadami komunalnymi, lecz dokonać jego usunięcia w sposób ekologiczny zgodnie z obowiązującymi w tym zakresie przepisami prawa lokalnego lub krajowego.
Ponieważ pompa ciepła zawiera czynniki chłodnicze i oleje oraz innego rodzaju elementy składowe, jej demontaż należy powierzyć wskazanemu w obowiązujących przepisach specjalistycznemu podmiotowi. Szczegółowe informacje na ten temat można uzyskać, kontaktując się z właściwymi organami władzy samorządowej.

⚠ PRECAUȚIE

Acest produs nu trebuie aruncat la gunoiul menajer la sfârșitul duratei sale de viață, ci trebuie scos din uz în conformitate cu reglementările locale sau naționale adecvate și într-un mod corect din punct de vedere al protecției mediului.
Datorită agentului frigorific, a uleiului și a altor componente pompei de căldură, demontarea acestuia trebuie făcută de un instalator profesionist în conformitate cu reglementările aplicabile. Contactați autoritățile competente pentru mai multe informații.

⚠ UPOZORNENIE

Tento výrobok nesmie byť po skončení jeho životnosti zmiešaný s bežným domovým odpadom a musí byť vyradený podľa príslušných miestnych alebo národných predpisov ekologicky správnym spôsobom.
V dôsledku chladiaceho média, oleja a iných komponentov obsiahnutých v tepelnom čerpadle, musí byť jeho demontáž vykonaná odborným inštalatérom podľa platných predpisov. Ďalšie informácie získate od príslušných orgánov.

⚠ ПОПЕРЕДЖЕННЯ!

Цей виріб не можна викидати разом зі звичайними побутовими відходами після закінчення його терміну служби, він повинен утилізуватися екологічно безпечним способом відповідно до діючих місцевих та національних законодавчих норм.
В зв'язку з наявністю в тепловому насосі холодоагенту, масла та інших компонентів, його демонтаж повинен виконуватися кваліфікованими спеціалістами відповідно до чинного законодавства. Для отримання додаткової інформації зверніться до відповідних органів влади.

MODELS CODIFICATION

Important note: Please, check, according to the model name, which is your heat pump type, how it is abbreviated and referred to in this Instruction Manual. This Instruction Manual is only related to Indoor Units TAW-(190/270)RHC combined with Outdoor Units RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E or RAM-90NYP5E.

CODIFICACIÓN DE LOS MODELOS

Nota importante: compruebe, de acuerdo con el nombre del modelo, el tipo de bomba de calor, su abreviatura y su referencia en el presente manual de instrucciones. Este Manual de instalación y funcionamiento sólo está relacionado con unidades interiores TAW-(190/270)RHC combinadas con unidades exteriores RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E o RAM-90NYP5E.

MODELLCODES

Wichtiger Hinweis: Bitte stellen Sie anhand der Modellbezeichnung den Typ der Wärmepumpe und das entsprechende, in diesem Technischen Handbuch verwendete Kürzel fest. Dieses Installations- und Betriebshandbuch bezieht sich nur auf TAW-(190/270)RHC Innengeräte kombiniert mit den Außengeräten RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E oder RAM-90NYP5E.

CODIFICATION DES MODÈLES

Remarque importante : veuillez déterminer, d'après le nom du modèle, quel est votre type de pompe à chaleur et quelle est son abréviation et référence dans ce manuel d'instruction. Ces manuels d'installation et de fonctionnement ne concernent que les unités intérieures TAW-(190/270)RHC combinées à des groupes extérieurs RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E ou RAM-90NYP5E.

CODICI DEI MODELLI

Nota importante: controllare in base al modello il tipo di pompa di calore, la descrizione e il tipo di abbreviazione utilizzati nel manuale di istruzioni. Questo manuale di installazione e d'uso fa riferimento alla sola combinazione di unità interne TAW-(190/270)RHC, unità esterne RAW-35RHC o RAM-53NYP3E, RAM-70NYP4E o RAM-90NYP5E.

CODIFICAÇÃO DE MODELOS

Nota importante: de acordo com o nome do modelo, verifique o tipo da sua bomba de calor e a respetiva abreviatura e menção neste manual de instruções. Este manual de instalação e de funcionamento só está relacionado com as unidades interiores TAW-(190/270)RHC combinadas com as unidades exteriores RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E ou RAM-90NYP5E.

MODELKODIFICERING

Vigtig information: Kontrollér venligst din varmepumpetype i henhold til modelnavnet, hvordan den forkortes, og hvilken reference den har i denne vejledning. Denne monterings og driftsmanual vedrører kun indendørsenhederne TAW-190/270)RHC kombineret med udendørsenhederne RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E eller RAM-90NYP5E.

CODERING VAN DE MODELLEN

Belangrijke opmerking: Controleer aan de hand van de modelnaam welk type warmtepomp u heeft, hoe de naam wordt afgekort en hoe ernaar wordt verwezen in deze instructiehandleiding. Deze Installatie- en bedieningshandleiding heeft alleen betrekking op binnenunits TAW-(190/270)RHC in combinatie met buitenunits RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E of RAM-90NYP5E.

MODELLER

Viktigt! Kontrollera med modellnamnet vilken typ av värmepump du har, hur den förkortas och hur den anges i den här handboken. Denna handbok för installation och användning gäller endast för inomhusenheterna TAW-(190/270)RHC kombinerad med utomhusenhet RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E eller RAM-90NYP5E.

ΚΩΔΙΚΟΠΟΙΗΣΗ ΜΟΝΤΕΛΩΝ

Σημαντική σημείωση: Ελέγξτε, σύμφωνα με το όνομα μοντέλου, τον τύπο της δικής σας αντλίας θέρμανσης και με ποια σύντμηση δηλώνεται και αναφέρεται σε αυτό το εγχειρίδιο. Αυτό το εγχειρίδιο εγκατάστασης και λειτουργίας αφορά μόνο τις εσωτερικές μονάδες TAW-(190/270)RHC συνδυασμός με εξωτερικές μονάδες RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E ή RAM-90NYP5E.

КОДИФИКАЦИЯ НА МОДЕЛИТЕ

Важна забележка: Съгласно названието на модела е необходимо да се провери какъв е видът на вашата затопляща помпа, какво е съкращението й в това Ръководство за употреба. Това Ръководство за указания се отнася само за вътрешни тела TAW-(190/270)RHC, съчетани с външни тела RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E или RAM-90NYP5E.

KÓDY MODELŮ

Důležité upozornění: Zkontrolujte na základě názvu modelu typ Vašeho tepelného čerpadla, jeho zkratku a způsob, kterým je zmiňován v tomto Návodu k instalaci a obsluze. Tento Návod k instalaci a k obsluze se týká pouze vnitřních jednotek TAW-(190/270)RHC v kombinaci s venkovními jednotkami RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E nebo RAM-90NYP5E.

MODELLEK KÓDOLÁSA

Fontos megjegyzés: Kérjük, hogy a modell neve alapján ellenőrizze a hőszivattyúja típusát, valamint azt, hogy az alábbi használati utasításban milyen rövidítéssel és hivatkozással szerepel. Az alábbi Használati útmutató csak a RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E vagy RAM-90NYP5E kültéri egységekkel kombinált TAW-(190/270)RHC beltéri egységekre vonatkozik.

MODELIŲ KODIFIKAVIMAS

Svarbi pastaba: Patikrinkite pagal modelio pavadinimą savo šilumos siurblio tipą, kaip jis trumpinamas ir kaip vadinamas šiame naudojimo vadove. Šis naudojimo vadovas yra susijęs tik su vidiniais elementais TAW-(190/270)RHC kartu su išoriniais elementais RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E arba RAM-90NYP5E.

OZNACZENIA KODOWE MODELI

Ważna informacja: Na podstawie nazwy modelu można sprawdzić typ pompy ciepła, jego zapis skrótowy i odsyłacz stosowany w odniesieniu do niego w treści tego dokumentu. Niniejsza instrukcja montażu i obsługi dotyczy wyłącznie jednostek wewnętrznych TAW-(190/270)RHC współpracujących z agregatami zewnętrznymi RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E lub RAM-90NYP5E.

CODIFICAREA MODELELOR

Observație importantă: Verificați, în funcție de numele modelului, tipul pompei dvs. de căldură, așa cum este abreviat și menționat în acest manual de instrucțiuni. Acest manual de instrucțiuni se referă numai la unitățile interioare TAW-(190/270)RHC combinate cu unități exterioare RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E sau RAM-90NYP5E.

KODIFIKÁCIA MODELOV

Dôležitá poznámka: Skontrolujte si podľa názvu modelu typ ohrievacieho čerpadla, jeho skratku a odkaz uvedený v tomto návode na použitie. T Tento návod na inštaláciu a prevádzku sa týka iba vnútorných jednotiek TAW-(190/270) RHC kombinovaných s vonkajšími jednotkami RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E alebo RAM-90NYP5E.

КОДИФІКАЦІЯ МОДЕЛЕЙ

Важлива примітка: будь ласка, перевірте, відповідно до назви моделі, тип вашого теплового насоса, скорочення його назви та його згадування в цьому посібнику з експлуатації. Цей посібник з експлуатації відноситься лише до внутрішніх блоків TAW-(190/270)RHC в поєднанні із зовнішніми блоками RAW-35RHC, RAM-53NYP3E, RAM-70NYP4E та RAM-90NYP5E.

English

WARNING

BURST HAZARD

Do not allow air or any gas mixture containing oxygen into refrigerant cycle (i.e. piping)

RISK OF EXPLOSION

The compressor must be stopped before removing the refrigerant pipes.

All service valves must be fully closed after pumping down operation.

WARNING

This symbol displayed on the unit indicates that this appliance is filled with R32, an odourless flammable refrigerant gas with low burning velocity (A2L class pursuant to ISO 817). If the refrigerant is leaked, there is a possibility of ignition if it enters in contact with an external ignition source.

CAUTION

This symbol displayed on the unit indicates that this appliance shall be handled by authorized service personnel only, referring to the Installation Manual.

CAUTION

This symbol displayed on the unit indicates that there is relevant information included in the Operation Manual and/or Installation Manual.

CAUTION

For more information, see the Installation and Operation Manual.

Español

ADVERTENCIA

RIESGO DE EXPLOSIÓN

Evite la entrada de aire o cualquier mezcla de gases que contenga oxígeno en el ciclo de refrigerante, por ejemplo, en las tuberías.

RIESGO DE EXPLOSIÓN

Antes de retirar las tuberías de refrigerante debe detener el compresor.

Tras recuperar el refrigerante todas las válvulas de servicio deben estar completamente cerradas.

ADVERTENCIA

Este símbolo mostrado en el aparato indica que este está cargado con R32, un gas refrigerante inflamable e inodoro con una velocidad de combustión lenta (Clase A2L de acuerdo con ISO 817). Una fuga de refrigerante puede provocar un incendio si entra en contacto con una fuente de combustión externa.

PRECAUCIÓN

Este símbolo mostrado en el aparato indica que este debe ser manipulado únicamente por personal de un servicio autorizado con el soporte del manual de instalación.

PRECAUCIÓN

Este símbolo mostrado en el aparato indica que los manuales de funcionamiento y/o de instalación contienen información importante.

PRECAUCIÓN

Para más información, consulte el Manual de Instalación y Funcionamiento.

Deutsch

WARNUNG

BERSTGEFAHR

Lassen Sie nicht zu, dass Luft oder eine Sauerstoff enthaltene Gasmischung in den Kältemittelkreislauf (z. B. Rohrleitungen) gelangt.

EXPLOSIONSGEFAHR

Der Kompressor muss abgeschaltet werden, bevor die Kältemittelleitungen entfernt werden.

Alle Betriebsventile müssen nach dem Abpumpbetrieb vollständig geschlossen sein.

WARNUNG

Dieses auf dem Gerät angezeigte Symbol zeigt an, dass das Gerät ist mit dem R32 geruchlosen brennbaren Kältemittel mit niedriger Brenngeschwindigkeit gefüllt (Klasse A2L gemäß ISO 817). Bei einem Kältemittelaustritt besteht die Gefahr der Entzündung, wenn das Kältemittel in Kontakt mit einer äußeren Zündquelle kommt.

VORSICHT

Dieses auf dem Gerät angezeigte Symbol zeigt an, dass dieses Gerät ein entzündbares Kältemittel verwendet. Bei einem Kältemittelaustritt besteht die Gefahr der Entzündung, wenn das Kältemittel in Kontakt mit einer äußeren Zündquelle kommt.

VORSICHT

Dieses auf dem Gerät angezeigte Symbol zeigt an, dass wichtige Informationen im Betriebshandbuch und/oder Installationshandbuch enthalten sind.

VORSICHT

Weitere Informationen finden Sie in der Installations- und betriebshandbuch.

Français

AVERTISSEMENT

DANGER D'ÉCLATEMENT

Évitez que de l'air ou un mélange de gaz contenant de l'oxygène ne pénètre dans le cycle frigorifique (c.-à-d. tuyauterie)

RISQUE D'EXPLOSION

Veillez à arrêter le compresseur avant de retirer les tuyauteries frigorifiques.

Veillez à fermer complètement toutes les vannes de service après la vidange.

AVERTISSEMENT

Ce symbole affiché sur l'appareil indique que l'appareil est chargé avec R32, un gaz frigorigène inflammable sans odeur à basse vitesse de combustion (Classe A2L selon ISO 817). En cas de fuite de frigorigène, il existe un risque d'incendie si celui-ci est exposé à une source d'inflammation externe.

ATTENTION

Ce symbole affiché sur l'appareil indique que seul le personnel de maintenance autorisé doit manipuler l'équipement, en se reportant au manuel d'installation.

ATTENTION

Ce symbole affiché sur l'appareil indique que le manuel de fonctionnement et/ou le manuel d'installation contient des informations importantes.

ATTENTION

Pour plus d'informations, reportez-vous au Manuel d'installation et de fonctionnement..

Italiano

AVVERTENZA

PERICOLO DI SCOPPIO

Fare in modo che all'interno del ciclo di refrigerazione non entrino aria o qualsiasi miscela di gas contenente ossigeno (per es. le tubazioni).

RISCHIO DI ESPLOSIONE

Il compressore deve essere arrestato prima di rimuovere i tubi del refrigerante.

Tutte le valvole di servizio devono essere completamente chiuse dopo lo svuotamento della pompa.

AVVERTENZA

Questo simbolo visualizzato sull'unità indica che l'unità é caricata con R32, un gas refrigerante infiammabile e inodore con una velocità di combustione lenta (Classe A2L secondo ISO 817). Una perdita di refrigerante può provocare un incendio se entra a contatto con una fonte di combustione esterna.

AVVERTENZA

Questo simbolo visualizzato sull'unità indica che l'unità deve essere gestita solo da personale di servizio autorizzato, facendo riferimento al Manuale di Installazione.

AVVERTENZA

Questo simbolo visualizzato sull'unità indica che ci sono informazioni rilevanti incluse nel Manuale d'uso e/o nel Manuale di Installazione.

AVVERTENZA

Per ulteriori informazioni, consultare il Manuale d'installazione e d'uso.

Português

ATENÇÃO

PERIGO DE REBENTAMENTO

Não permitir a entrada de ar ou de qualquer mistura de gás com oxigénio para o ciclo de refrigeração (isto é, para tubagem).

RISCO DE EXPLOSÃO

O compressor deve ser desligado antes da remoção dos tubos de refrigerante.

As válvulas de manutenção devem estar completamente fechadas depois da eliminação do refrigerante.

ATENÇÃO

Este símbolo mostrado na unidade indica que a unidade contém R32, um gás refrigerante inflamável e inodoro com uma baixa velocidade de queima (Classe A2L de acordo com ISO 817). Em caso de fuga de refrigerante, existe a possibilidade de ignição se entrar em contacto com uma fonte de ignição externa.

CUIDADO

Este símbolo mostrado na unidade indica que a unidade deve ser manuseada apenas por pessoal autorizado, mediante consulta do Manual de Instalação.

CUIDADO

Este símbolo mostrado na unidade indica que o Manual de Funcionamento e/ou Instalação inclui informação relevante.

CUIDADO

Para mais informação, consulte o Manual de Instalaçao e de Funcionamiento.

Dansk

ADVARSEL

BRISTEFARE

Lad ikke luft eller en gasblanding, der indeholder ilt, komme ind i kølemiddelcyklussen (dvs. rørføringen)

RISIKO FOR EKSPLOSION

Kompressoren skal stoppes, inden kølemiddelrørene fjernes.

Alle serviceventiler skal være helt lukkede, når kølemidlet er blevet fjernet.

ADVARSEL

Dette symbol vises på enheden angiver, at enheden er fyldt med R32, en brændbar og lugtfri kølemiddelgas med en langsom forbrændingshastighed (klasse A2L i henhold til ISO 817). Udslip af kølemiddel kan forårsage brand, hvis kølemidlet kommer i kontakt med en ekstern antændelseskilde.

FORSIGTIG

Dette symbol vises på enheden angiver, at enheden kun skal håndteres af autoriseret servicepersonale under henvisning til installationsmanualen.

FORSIGTIG

Dette symbol vises på enheden angiver, at der er relevante oplysninger, der er indeholdt i drifts- og/eller installationsmanualen.

FORSIGTIG

For yderligere information se installations-og betjeningsvejledningen.

Nederlands

WAARSCHUWING

BARSTGEVAAR

Laat geen lucht of een gasmengsel dat zuurstof bevat in de koelmiddelcyclus (d.w.z. leidingen).

EXPLOSIEGEVAAR

De compressor moet worden gestopt alvorens de koelmiddelpijpen te verwijderen.

Alle onderhoudskranen moeten volledig gesloten zijn na het pompen.

WAARSCHUWING

Dit symbool op het apparaat geeft aan dat het apparaat is gevuld met R32, een geurloos ontvlambaar koelmiddel met een lage brandsnelheid (klasse A2L volgens ISO 817). Als het koelmiddel lekt, kan het ontbranden wanneer het in contact komt met een externe ontstekingsbron.

LET OP

Dit symbool op het apparaat geeft aan dat het apparaat alleen door bevoegd personeel mag worden gebruikt, met verwijzing naar de installatiehandleiding.

LET OP

Dit symbool op het apparaat geeft aan dat er relevante informatie is opgenomen in de gebruiksaanwijzing en / of installatiehandleiding.

LET OP

Meer informatie hierover vindt u in de installatie-en bedieningshandleiding.

Svenska

VARNING

SPRÄNGRISK

Låt ingen luft eller gasblandning innehållande syra komma in i kylmedelcykeln (t.ex. rörledning)

RISK FÖR EXPLOSION

Kompression måste stängas av innan kylrören avlägsnas.

Alla serviceventiler måste stängas av ordentligt efter nedpumpning.

VARNING

Den här symbolen som visas på enheten indikerar att enheten är fylld med R32, ett luktfritt brandfarligt kylmedel med låg förbränningshastighet (A2L-klass enligt ISO 817). Om kylmedel läcker ut finns det risk för antändning om det kommer i kontakt med en extern antändningskälla.

VARNING

Den här symbolen som visas på enheten indikerar att enheten endast får hanteras av auktoriserad servicepersonal och i enlighet med installationsmanualen.

VARNING

Den här symbolen som visas på enheten indikerar att användarmanualen/installationsmanualen innehåller viktig information.

VARNING

För mer information, se referensguiden för installation- och drifthandbok.

Ελλhnika

ΠΡΟΕΙΔΟΠΟΙΗΣΗ

ΚΙΝΔΥΝΟΣ ΦΩΤΙΑΣ

Μην επιτρέπετε την είσοδο αέρα ή οποιοδήποτε μείγμα αερίου που περιέχει οξυγόνο στον κύκλο ψυκτικού μέσου (δηλαδή σωλήνωση)

ΚΙΝΔΥΝΟΣ ΕΚΡΗΞΗΣ

Ο συμπιεστής πρέπει να έχει σταματήσει προτού αφαιρέσετε τους σωλήνες ψυκτικού μέσου.

Όλες οι βαλβίδες λειτουργίας πρέπει να είναι πλήρως κλειστές μετά την λειτουργία άντλησης.

ΠΡΟΕΙΔΟΠΟΙΗΣΗ

Αυτό το σύμβολο που εμφανίζεται στη μονάδα δείχνει ότι η μονάδα είναι γεμάτη με R32, ένα άοσμο εύφλεκτο ψυκτικό με χαμηλή ταχύτητα καύσης (κλάση A2L σύμφωνα με το πρότυπο ISO 817). Η διαρροή του ψυκτικού μέσου μπορεί να προκαλέσει πυρκαγιά αν έρθει σε επαφή με ένα εξωτερικό μέσο.

ΠΡΟΣΟΧΗ

Αυτό το σύμβολο που εμφανίζεται στη μονάδα δείχνει ότι η μονάδα πρέπει να πραγματοποιείται μόνο από εγκεκριμένο προσωπικό σέρβις σύμφωνα με το εγχειρίδιο εγκατάστασης.

ΠΡΟΣΟΧΗ

Αυτό το σύμβολο που εμφανίζεται στη μονάδα δείχνει ότι υπάρχουν σχετικές πληροφορίες στο εγχειρίδιο λειτουργίας και/ή στο εγχειρίδιο εγκατάστασης.

ΠΡΟΣΟΧΗ

Για περισσότερες πληροφορίες, ανατρέξτε στο Εγχειρίδιο εγκατάστασης και λειτουργίας.

български

ПРЕДУПРЕЖДЕНИЕ

ОПАСНОСТ ОТ ИЗБУХВАНЕ

В цикъла на хладилния агент (т.е. в тръбите) не бива да се допуска проникването на въздух и каквато и да било друга газова смес

РИСК ОТ ВЗРИВ

Компресорът трябва да е напълно спрял, преди да се отстраняват тръбите за хладилния агент.

Всички обслужващи клапани трябва да са напълно затворени след операцията по изпомпване.

ПРЕДУПРЕЖДЕНИЕ

Този символ, изобразен на изделието, показва, че този уред е запълнен с R32, леснозапалим хладилен газ без мирис и с ниска скорост на горене (клас A2L по ISO 817). Ако хладилният агент протече, възниква възможност от запалване, ако влезе в контакт с външен източник на запалване.

ВНИМАНИЕ

Този символ, изобразен на изделието, показва, че с този уред може да работят само упълномощени за тази цел сервизни техници и при спазване указанията от Ръководството за инсталиране.

ВНИМАНИЕ

Този символ, изобразен на изделието, показва, че в Ръководството за експлоатация и/или в Ръководството за инсталиране има съответната информация.

ВНИМАНИЕ

За повече информация виж Ръководството за инсталиране и експлоатация.

Čeština

VAROVÁNÍ

NEBEZPEČÍ TŘESKU

Nedopusťte, aby vzduch či jakákoli plynná směs obsahující kyslík pronikly do chladivového okruhu (např. potrubí).

NEBEZPEČÍ VÝBUCHU

Kompresor je třeba před odstraněním chladivového potrubí zastavit.

Veškeré provozní ventily musí být před odčerpáním zcela uzavřené.

VAROVÁNÍ

Tento symbol zobrazený na jednotce označuje, že náplní tohoto zařízení je R32, hořlavý chladivový plyn bez zápachu s mírnou hořlavostí (třída A2L podle ISO 817). Pokud chladivo unikne, existuje možnost vznícení, pokud se dojde ke kontaktu s externím zápalným zdrojem.

POZOR

Tento symbol zobrazený na jednotce označuje, že podle Návodu k instalaci smí toto zařízení obsluhovat pouze autorizovaný technický personál.

POZOR

Tento symbol zobrazený na jednotce označuje, že Návod k obsluze a/nebo v Návod k instalaci obsahuje relevantní informace.

POZOR

Více informací naleznete v Návodu k instalaci a obsluze.

Magyar nyelv

FIGYELEM

FELSZAKADÁSVESZÉLY

Ne engedje, hogy a hűtőközegbe (pl. a csővezetékekbe) levegő vagy oxigéntartalmú gázkeverék kerüljön.

ROBBANÁSVESZÉLY

A kompresszort a hűtőközeg csővezetékeinek eltávolítása előtt le kell állítani.

A szivattyúzás után minden szervizszelepet teljesen el kell zárni.

FIGYELEM

A készüléken megjelenő szimbólum azt jelzi, hogy a berendezés R32 hűtőközeggel van feltöltve, amely egy szagtalan, gyúlékony, alacsony égési sebességű (az ISO 817 szabvány értelmében A2L osztályú) hűtőközeg gáz. A hűtőközeg szivárgása esetén gyulladásveszély áll fenn, amennyiben a hűtőközeg külső gyújtóforrással érintkezik.

FIGYELMEZTETÉS

Ez a készüléken megjelenő szimbólum azt jelzi, hogy a berendezést csak felhatalmazott szervizszemélyzet kezelheti, a Telepítési útmutató alapján.

FIGYELMEZTETÉS

Ez a készüléken megjelenő szimbólum azt jelzi, hogy az Üzemeltetési útmutató és/vagy a Telepítési útmutató fontos információt tartalmaz az adott kérdésre vonatkozóan.

FIGYELMEZTETÉS

További információkért lásd a Telepítési és Üzemeltetési útmutatót.

Lietuvių

PERSPĖJIMAS

SPROGIMO PAVOJUS

Neleiskite, kad į aušinimo ciklą (t. y. vamzdynus) patektų oro ar kitų dujų mišinių, kuriuose yra deguonies.

SPROGIMO RIZIKA

Prieš ištuštinant aušinimo medžiagos vamzdžius turi būti sustabdytas kompresorius.

Išsiurbus visi eksploatavimo vožtuvai turi būti visiškai uždaryti.

PERSPĖJIMAS

Šis ant elemento rodomas simbolis nurodo, kad šis prietaisas užpildytas R32, bekvapėmis degiomis aušinimo dujomis, turinčiomis mažą degimo greitį (A2L klasė pagal ISO 817). Jei aušinimo medžiaga nutekėjo ir ji liečiasi su išoriniu degimo šaltiniu, kyla užsidegimo galimybė.

ĮSPĖJIMAS

Šis ant elemento rodomas simbolis nurodo, kad su šiuo prietaisu gali dirbti tik įgalioti techninės priežiūros darbuotojai, remdamiesi Montavimo vadovu.

ĮSPĖJIMAS

Šis ant elemento rodomas simbolis nurodo, kad naudojimo vadove ir (arba) montavimo vadove yra informacijos.

ĮSPĖJIMAS

Daugiau informacijos rasite „Montavimo ir naudojimo vadove“.

Polski

OSTRZEŻENIE

ZAGROŻENIE WYBUCHEM

Niedopuszczalne jest przedostanie się powietrza lub mieszaniny gazowej zawierającej tlen do obiegu (tj. przewodów rurowych) czynnika chłodniczego.

RYZYKO WYBUCHU

Przed odłączeniem przewodów rurowych czynnika chłodniczego należy wyłączyć sprężarkę.

Po odzyskaniu chłodziwa, niezbędne jest całkowite zamknięcie wszystkich zaworów serwisowych.

OSTRZEŻENIE

Umieszczenie tego symbolu na jednostce oznacza, że jest ona napełniona czynnikiem chłodniczym R32, bezwonnym i palnym gazem o niskiej prędkości spalania (klasa A2L zgodnie z normą ISO 817). Wyciek chłodziwa może spowodować pożar, gdyby doszło do kontaktu z zewnętrznym źródłem zapłonu.

OSTROŻNIE

Umieszczenie tego symbolu na jednostce oznacza, że może być ona obsługiwana wyłącznie przez pracowników autoryzowanego serwisu w oparciu o informacje zawarte w Instrukcji instalacji.

OSTROŻNIE

Umieszczenie tego symbolu na jednostce oznacza, że w Instrukcji obsługi i/lub Instrukcji instalacji znajdują się ważne informacje na dany temat.

OSTROŻNIE

Szczegółowe informacje można znaleźć w Instrukcji instalacji i obsługi.

Română

AVERTISMENT

PERICOL DE DEFLAGRAȚIE

Nu permiteți pătrunderea aerului sau oricărui amestec de gaz care conține oxigen în ciclul agentului frigorific (adică în conducte).

RISC DE EXPLOZIE

Trebuie să opriți compresorul înainte de a decupla conductele de agent frigorific.

Toate supapele de serviciu trebuie să fie complet închise după finalizarea operației de evacuare a agentului frigorific.

AVERTISMENT

Această pictogramă afișată pe unitate indică faptul că acest aparat este umplut cu R32, un gaz frigorific inflamabil inodor, cu viteză de ardere redusă (clasa A2L conform standardului ISO 817). Pierderile de agent frigorific pot cauza pericol de aprindere dacă intră în contact cu o sursă de aprindere externă.

PRECAUȚIE

Această pictogramă afișată pe unitate indică faptul că acest aparat trebuie să fie manipulat doar de personal de service autorizat, respectându-se instrucțiunile din manualul de instalare.

PRECAUȚIE

Această pictogramă afișată pe unitate indică faptul că manualul de operare și/sau manualul de instalare conțin informații importante.

PRECAUȚIE

Pentru mai multe informații vă rugăm să consultați manualul de instalare și operare.

Slovenčina

VAROVANIE

NEBEZPEČENSTVO VÝBUCHU

Zabráňte vniknutia vzduchu alebo akejkoľvek zmesi plynov obsahujúcich kyslík do okruhu chladiva (t.j. do potrubia)

RIZIKO VÝBUCHU

Pre odstránením chladiaceho potrubia musí byť kompresor zastavený.

Po prečerpaní musia byť všetky servisné ventily úplne zatvorené.

VAROVANIE

Tento symbol zobrazený na jednotke označuje, že je tento spotrebič naplnený chladivom R32, horľavým plynom bez zápachu s nízkou rýchlosťou horenia (trieda A2L podľa normy ISO 817). Ak dôjde k úniku chladiva, v prípade kontaktu s externým zápalným zdrojom môže dôjsť k vznieteniu.

UPOZORNENIE

Tento symbol uvedený na jednotke označuje, že s prístrojom môže manipulovať iba autorizovaný servisný personál s odkazom na návod na inštaláciu.

UPOZORNENIE

Tento symbol uvedený na jednotke označuje, príslušné informácie sa nachádzajú v návode na inštaláciu a/alebo návode na prevádzku.

UPOZORNENIE

Viac informácii nájdete v návode na inštaláciu a v návode na prevádzku.

Українська

УВАГА

РИЗИК ВИБУХУ

Не допускайте потрапляння повітря або будь-якої іншої газової суміші, що містить кисень, в контур холодоагенту, наприклад, в труби.

РИЗИК ВИБУХУ

Перш ніж знімати труби холодоагенту, необхідно зупинити компресор.

Після відновлення холодоагенту всі робочі клапани повинні бути повністю закриті.

УВАГА

Цей символ, що відображається на пристрої, означає, що в цьому пристрої використовується R32, легкозаймистий холодоагент без запаху з повільною швидкістю горіння (клас A2L відповідно до стандарту ISO 817). Витік холодоагенту може спричинити пожежу в разі контакту із зовнішнім джерелом горіння.

ПОПЕРЕДЖЕННЯ!

Цей символ, що відображається на пристрої, вказує на те, що з цим пристроєм повинен працювати лише уповноважений технічний персонал, ознайомлений із «Інструкціями з монтажу».

ПОПЕРЕДЖЕННЯ!

Цей символ, що відображається на пристрої, вказує на те, що з важливою інформацією можна ознайомитися в «Посібнику з експлуатації» та/або «Інструкціях з монтажу».

ПОПЕРЕДЖЕННЯ!

Для отримання додаткової інформації ознайомтеся з посібником з монтажу та експлуатації.

EN	English	Original version
ES	Español	Versión traducida
DE	Deutsch	Übersetzte Version
FR	Français	Version traduite
IT	Italiano	Versione tradotta
PT	Português	Versão traduzidal
DA	Dansk	Oversat version
NL	Nederlands	Vertaalde versie
SV	Svenska	Översatt version
EL	Ελληνικα	Μεταφρασμένη έκδοση
BG	Български	Преведена версия
CS	Čeština	Přeložená verze
HU	Magyar	Lefordított változat
LT	Lietuvių	Versta versija
PL	Polski	Tłumaczenie wersji oryginalnej
RO	Română	Versiune tradusă
SK	Slovenčina	Preložená verzia
UK	Українська	Перекладена версія

EN

The English version is the original one; other languages are translated from English. Should any discrepancy occur between the English and the translated versions, the English version shall prevail.

ES

La versión en inglés es la original, los demás idiomas se han traducido de la versión inglesa. En el caso de que existan discrepancias entre la versión inglesa y las traducidas, la que debe prevalecer es la inglesa.

DE

Der englische Version ist die Original-Version. Andere Sprachen sind aus dem Englisch übersetzt. Sollte eine Abweichung zwischen der englischen und der übersetzten Version auftreten, hat die englische Version Vorrang.

FR

La version en anglais contient les instructions d'origine, les autres langues sont traduites depuis la version anglaise. En cas de discordance entre la version en anglais et les versions traduites, la version en anglais prévaut.

IT

La versione in inglese è quella originale, le versioni in altre lingue sono una traduzione dall'inglese. In caso di discrepanza tra l'inglese e le versioni tradotte, prevarrà la versione inglese.

PT

A versão inglesa é a original; os outros idiomas são traduzidos do inglês. Se houver uma discrepância entre a versão inglesa e as versões traduzidas, prevalece a primeira.

DA

Den engelske version er den originale, øvrige sprog er oversat fra engelsk. Hvis der opstår uoverensstemmelse mellem den engelske og den oversatte version, vil den engelske version være gældende.

NL

De originele handleiding is in het Engels, de tekst in andere talen is vertaald vanuit het Engels. Mochten er verschillen zijn tussen de Engelse versie en de vertaalde, dan zal de Engelse versie altijd overwinnen.

SV

Den engelska texten är den ursprungliga; andra språk har översatts från engelska. Om det skulle förekomma skillnader mellan den engelska och den översatta versionen, så ska den engelska versionen följas.

EL

Οι πρωτότυπες οδηγίες είναι στα αγγλικά. Οι άλλες γλώσσες είναι μετάφραση από τα αγγλικά. Αν υπάρχει οποιαδήποτε ασυμφωνία ανάμεσα στην αγγλική και τις μεταφράσεις, αυτή που επικρατεί είναι η αγγλική έκδοση.

BG

Версията на английски език е оригиналната; версиите на останалите езици са в превод от английски език. При различие между английската версия и преводна версия на друг език за меродавна се счита английската версия.

CS

Originální verze tohoto dokumentu je v angličtině; ostatní jazykové varianty jsou z angličtiny přeložené. Pokud mezi anglickou a jakoukoli jinou jazykovou verzí dojde k rozporu, bude převažovat anglická verze.

HU

Az eredeti változat az angol; az egyéb nyelvű változatok angolról lettek fordítva. Amennyiben az angol és a fordított verziók között bármilyen eltérés mutatkozik, az angol nyelvű változat a mérvadó.

LT

Versija anglų kalba yra originali; versijos kitomis kalbomis yra išverstos iš anglų kalbos. Jei yra neatitikimų tarp versijos anglų kalba ir verstinių versijų, pirmenybė teikiama versijai anglų kalba.

PL

Wersja angielska jest wersją oryginalną - wszystkie pozostałe stanowią jej tłumaczenie na odpowiednie języki. W przypadku stwierdzenia jakichkolwiek rozbieżności między oryginałem a jego tłumaczeniem, rozstrzygająca jest wersja w języku angielskim.

RO

Versiunea originală este cea în limba engleză; versiunile în alte limbi sunt traduse din limba engleză. Dacă există vreo discrepanță între versiunile în limba engleză și versiunea tradusă, prevalează versiunea în limba engleză.

SK

Anglická verzia je pôvodná, ďalšie jazyky sú preložené z angličtiny. V prípade akýchkoľvek nezrovnalostí medzi anglickou a preloženou verziou, bude rozhodujúca anglická verzia.

UK

Англійська версія є оригінальною; інші мови переведені з англійської. У разі виникнення розбіжностей між англійською та перекладеною версіями, англійська версія має переважну силу.

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1 GENERAL INFORMATION

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As a result, some of the images or data used to illustrate this document may not refer to specific models. No claims will be accepted based on the data, illustrations and descriptions included in this manual.

2 SAFETY

This appliance is filled with R32, an odourless low burning velocity refrigerant. If the refrigerant is leaked, there is a possibility of ignition if it enters in contact with an external ignitions source.

RISK OF EXPLOSION

The compressor must be stopped before removing the refrigerant pipes.

All service valves must be fully closed after pumping down operation.

- Make sure that unit installation and refrigerant piping installation comply with applicable legislation in each country. Also, in Europe, EN378 must be complied, as it is the applicable standard.
- **PLEASE READ THE MANUAL CAREFULLY BEFORE STARTING TO WORK ON THE INSTALLATION OF THE SANITARY HOT WATER HEAT PUMP SYSTEM.** Failure to observe the instructions for installation, use and operation described in this documentation may result in operating failure including potentially serious faults, or even the destruction of the sanitary hot water heat pump system.
- Verify that all the information required for the correct installation of the system is correct according to the manuals bundled with outdoor and indoor units. Contact your distributor if it is not the case.

Indoor Unit		Outdoor Unit	
TAW-(190/270)RHC		RAW-35RHC RAM-53NYP3E RAM-70NYP4E RAM-90NYP5E	
	Instruction manual + QR		Installation manual
			Additional safety manual for R32 refrigerant air conditioner and heat pump according to IEC 60335-2-40:2018

2.1 APPLIED SYMBOLS

During normal heat pump system design work or unit installation, greater attention must be paid in certain situations requiring particular care in order to avoid injuries and damage to the unit, the installation or the building or property.

Situations that jeopardise the safety of those in the surrounding area or that put the unit itself in risk are clearly indicated in this manual.

A series of special symbols are used to clearly identify these situations.

Pay close attention to these symbols and to the messages following them, as your safety and that of others depends on it.

⚠ DANGER

- ***The text following this symbol contains information and instructions relating directly to your safety and physical integrity.***
- ***Not taking these instructions into account could lead to serious, very serious or even fatal injuries to you and others in the proximities of the unit.***

In the text following the danger symbol you can also find information on safe procedures during unit installation.

⚠ CAUTION

- *The text following this symbol contains information and instructions relating directly to your safety and physical integrity.*
- *Not taking these instructions into account could lead to minor injuries to you and others in the proximities of the unit.*
- *Not taking these instructions into account could lead to unit damage.*

In the text following the caution symbol you can also find information on safe procedures during unit installation.

NOTE

- *The text following this symbol contains information or instructions that may be of use or that require a more thorough explanation.*
- *Instructions regarding inspections to be made on unit parts or systems may also be included.*

2.2 INFORMATION ABOUT SAFETY

Symbol	Explanation
	Before installation, read the installation and operation manual, and the wiring instruction sheet.
	Before performing maintenance and service tasks, read the service manual.
	For more information, see the Installation and Operation Manual.

⚠ DANGER

- ***DO NOT CONNECT THE POWER SUPPLY TO THE INDOOR UNIT PRIOR TO FILLING DHW CIRCUITS WITH WATER AND CHECKING WATER PRESSURE AND THE TOTAL ABSENCE OF ANY WATER LEAKAGE.***
- ***Do not pour water over the indoor unit electrical parts. A serious electrical shock may occur if the electrical components enter in contact with water.***
- ***Do not touch or adjust the safety devices inside the sanitary hot water heat pump. Touching or adjusting these devices may cause a serious accident.***
- ***Do not open the service cover or access the sanitary hot water heat pump without disconnecting the main power supply.***
- ***In case of fire, turn the main switch off immediately, put out the fire at once and contact your service contractor.***
- ***It must be made sure that the sanitary hot water heat pump cannot operate accidentally either without water in the hydraulic system or with air inside it.***
- ***Make sure the unit is properly connected to ground. A disconnected or broken ground cable may cause malfunction and electric shock.***
- ***Do not connect the power supply to the indoor unit prior to filling the DHW circuit with water and checking water pressure and the total absence of any water leakage.***
- ***Do not connect or adjust any wiring or connections unless the main power switch is OFF.***
- ***When using more than one power source, check and ensure that all of them are turned OFF before operating the indoor unit.***
- ***Avoid wiring installation in contact with the refrigerant pipes, water pipes, edges of plates and electrical components inside the unit to prevent damage, which may cause electric shock or short circuit.***

⚠ CAUTION

- *Do not use any sprays such as insecticide, lacquer, hair spray or other flammable gases within approximately one meter from the system.*
- *If the circuit breaker in the installation or the fuse in the unit are triggered often, stop the system and contact your service contractor.*
- *Do not make service or inspections tasks by yourself. This work must be performed by a qualified professional installer.*
- *This appliance must be used only by adult and capable people, having received the technical information or instructions to handle the appliance properly and safely.*
- *Children should be supervised to ensure that they do not play with the appliance.*
- *Do not let any foreign body into the water inlet and outlet piping of the sanitary hot water heat pump.*
- *MAINTENANCE CAUTIONS*

  1 Turn off the system and the water valves when water is not supplied due to a suspension of the water supply or repair and maintenance works. Continued use of the unit under these conditions may result in clogging of the strainers due to the impurities contained in the inlet water, eventually leading to failure and breakdown.

  2 Do not open the hot water supply knob on the mixer tap during a suspension of water supply. Once the water supply has been restored, open the hot water supply knob on the mixer tap and check that the water has become clean before turning on the water valve.

  3 Stop operation and turn the breaker off before starting maintenance. Failure to heed this instruction may result in electric shock.

  4 Do not expose the unit to water. Failure to follow this instruction may result in electric shock.

  5 Do not stand on an unstable mounting support during maintenance. Failure to follow this instruction may result in personal injury if the support tips over.

  6 Use gloves during maintenance. Otherwise, you may suffer burns or injuries if you come into contact with components or pipes inside the unit.

  7 Drain the tank when the unit is not going to be used for an extended period of time. The quality of water will change if it is left in the tank for one month or longer.

  8 Fill the tank completely before turning the power on. The tank may overheat causing damage if the power is turned on when there is no water in the tank.

  9 Do not touch drain water or drain pipes during draining. The water is very hot and may cause burn injuries.

  10 Do not touch the mixer tap when the tank is being filled. The tap is very hot and may cause burn injuries.

  11 Do not touch the pressure relief valve or drain pipes when inspecting the pressure relief valve. The valve is very hot and may cause burn injuries.

  12 Do not use 40°C or hotter water for cleaning as it may result in deformation of plastic parts.
- *Fill the circuit with tap water. Water that conforms to the drinking water regulation in each country must be used. Do not use water from sources not subject to sanitary control like wells, rivers or lakes, since it may have a high content of impurities, salinity, lime, etc.*
- *Make sure that the field supplied electrical components (wiring, protection devices, connectors and wire terminals) are properly selected, connected, identified and fixed to the corresponding terminals of the unit, specially the protection (earth) and power wiring, taking into account the applicable national and local regulations. If necessary, contact your local authority concerning standards, rules, regulations, etc.*
- *Establish proper earthing; Incomplete earthing may cause electric shock.*
- *The pressure of the DHW circuit in the tank has to be lower than 7 bars (0.7 MPa).*

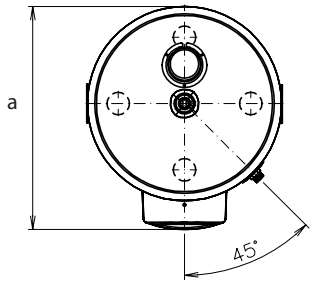
2.3 IMPORTANT NOTICE

- This sanitary hot water heat pump has been designed for the production of sanitary hot water for human consumption. Do not use it for other purposes such as for drying clothes, heating foods or for any other heating process.
- Refer to the codification of models to confirm the main characteristics of your system.
- Check and make sure that the explanations of each part of this manual apply to your specific model of sanitary hot water heat pump.
- Signal words (NOTE, DANGER and CAUTION) are used to identify levels of hazard seriousness. Definitions for identifying hazard levels are provided in the first pages of this document.
- This manual should be considered as an integral part of the sanitary hot water heat pump, and must be kept for future reference.
- Both the indoor and outdoor unit must be installed at a location, structure or support prepared to withstand a heavy weight. Otherwise, noise and vibration may increase, and the units may collapse and cause damage to property or physical injuries, particularly in case of an earthquake or a similar phenomenon.
- Keep the water temperature of the system above the freezing temperature (above 5ºC).
- Please install a thermostat-type mixer tap in each hot water supply spot to prevent scald accidents, and a drain trap in the drainage piping.
- Please use dielectric joints to prevent the electrolysis phenomenon.
- Piping parts around the tank such as the pressure-relief valve and the drain valve must be easily accessed for maintenance and inspection.
- Be sure to use the specified piping set for R32. Otherwise, this may result in damage to copper pipes and operational failure.
- Make sure that nothing but the specified refrigerant (R32) is inside the refrigerant cycle when installing or removing the sanitary hot water heat pump. If air or moisture remain in the refrigeration cycle, pressure may become abnormally high and cause rupture.
- Ventilate the room if any refrigerant has leaked out during the installation work. The refrigerant produces a poisonous gas if exposed to fire.
- The drainage gas flows backward if there is no drain trap, which may increase the corrosion of the hot water pump considerably, leading to breakdown.
- Be sure to use a dedicated power circuit. Never use a power circuit shared with another appliance.
- For wiring, use a cable long enough to cover the entire distance with no intermediate connections. The power circuit must be a dedicated one, without additional loads on the power supply. Failure to do so may result in abnormal heat, electrical shock, or fire.
- Be sure to connect both outdoor and indoor units to ground. An improperly made or incomplete ground connection may cause damage or short-circuits that could result in electrical shock and fire. A high surge current from lightning or other sources may cause damage to the outdoor unit. Ground connections must not be made to utility pipes, gas pipes, water pipes, surge absorb, lightning rods or telephone ground connections.
- Be sure to install an earth leakage and a circuit breaker according to local regulations. Failure to do so may result in electrical shock.
- The operation modes of these units are controlled by the unit controller.
- Hitachi cannot anticipate every possible circumstance that might involve a potential hazard. If you have any questions, contact your service contractor of Hitachi.
- The sanitary hot water heat pump must be installed by a professional installer. The installation must comply with local and European regulations.
- The refrigerant and water circuits must be installed and inspected by a professional installer and must comply with all the relevant European and national regulations.
- It is recommended to use flexible joints for the inlet and outlet of water piping, in order to avoid the transmission of vibration.
- Water temperature (min/max): 5 ºC / 60 ºC
- Water pressure (min/max): 0.1 MPa / 0.3 MPa
- This equipment must be connected to the water main.
- If the domestic cold water entry pressure is higher than the equipment’s design pressure (1 MPa), a pressure reducer must be fitted with a nominal value of 0.7 MPa.

3 NAME OF PARTS AND DIMENSIONAL DATA

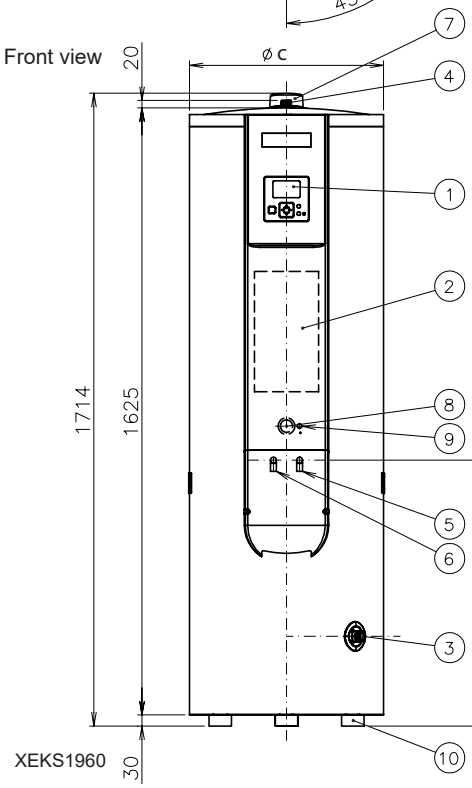
3.1 TANK UNIT

Top view

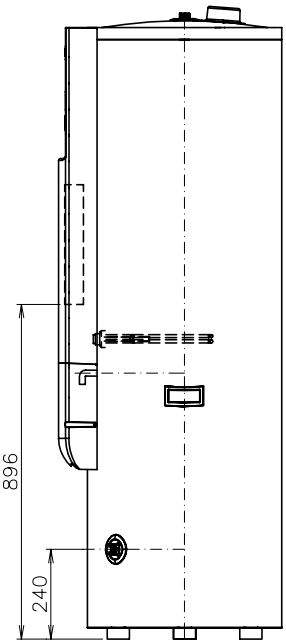


	a	Ø c	Gross weight (kg)
TAW-190RHC	597	520	*63*
TAW-270RHC	681	600	*74*

Front view



Side view

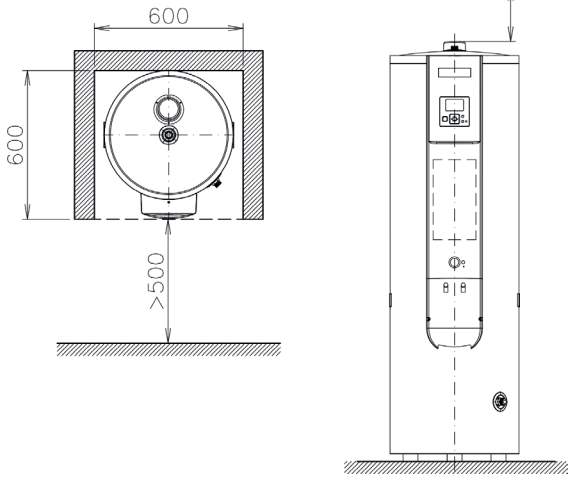


Nº	Name	Remarks
1	LCD controller	
2	Electrical box	
3	Cold water inlet	G 3/4" (blue)
4	Hot water outlet	G 3/4" (red)
5	Liquid refrigerant connection	1/4" Ø6.35 mm (black)
6	Gas refrigerant connection	3/8" Ø9.52 mm (black)
7	Anode port	Sold separately as accessory: Ti anode
8	Heater	1.64 kW / 230 V
9	Thermistor	
10	Mounting foot	×4

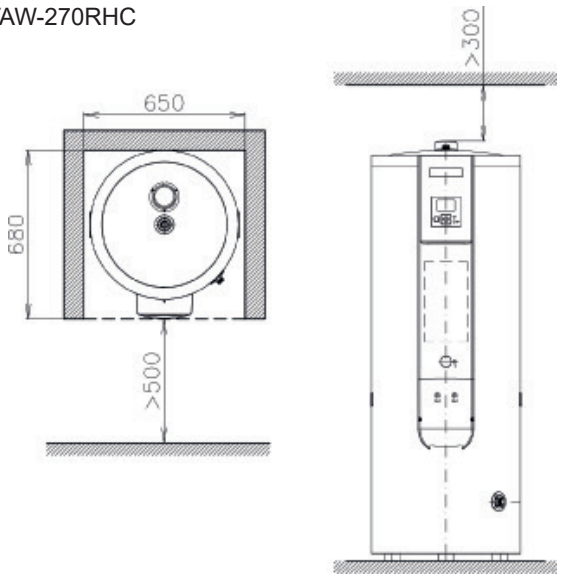
Units in: mm

4 SERVICE SPACE

TAW-190RHC



TAW-270RHC



5 UNIT INSTALLATION

5.1 GENERAL NOTES

5.1.1 Factory-supplied unit components

Accessory	Image	Qty.	Purpose
Instruction manual		1	Installation and operational manual for the installation of the device.
Flare nuts		*2*	For the connection of refrigerant pipe

NOTE

- *The previous accessories are supplied inside the unit.*
- *If some of these accessories are not packed with the unit or any damage to the unit is detected, please contact your dealer.*
- *Please refer to the Installation and Operation Manual of the outdoor unit for information on the installation of the outdoor unit.*

5.1.2 Selection of the installation location

The YUTAMPO tank of the split system with sanitary hot water heat pump must be installed satisfying these basic requirements:

- The YUTAMPO tank is intended to be installed in an indoor environment with an ambient temperature range of 5~30ºC. The ambient temperature around the indoor unit must be >5°C to prevent water from freezing.
- The indoor unit is designed to be mounted on the floor. The floor of the place chosen for installation must be flat, with the surface made of a non-burnable material, and must be strong enough to withstand the weight of the indoor unit as well as the weight of the DHW tank when it is completely full of water.
- The floor at the place of installation must be waterproof and have a proper drainage, in order to limit the extent of damage in case of water leakage.
- The recommended servicing space must be kept to allow servicing as well as a sufficient circulation of air around the unit.
- Enough space must be reserved for the installation of a required pressure relief valve (field supplied) at the DHW inlet connection of the tank (as close as possible to the tank). A shut-down valve (field supplied) must be also installed at the DHW outlet connection.
- It is the responsibility of the installer to ensure that installation and draining works are compliant with regulations.
- The indoor unit must be protected against the intrusion of small animals (like rodents) which could damage the wiring, drain pipes or electrical parts, causing a fire in the worst case.
- The installation environment shall be free of frost and excessive humidity.
- The unit shall not be installed in locations where it is exposed to oil, smoke, dust or particles, such as kitchens or factories.
- The unit shall not be installed in locations where it is exposed to large voltage fluctuations or electromagnetic interference, such as hospitals or workshops.
- If the unit is to be installed in a coastal area where it is exposed to salty air, in a hot spring area or other areas where special environmental conditions prevail, consult your dealer before installing the unit.
- Do not install the indoor unit where electromagnetic waves are directly radiated to the electrical box.
- Install the YUTAMPO system at a distance of 1 m or more from TV sets, radios, radio antennas or similar devices. In areas with poor reception, increase the distance so that units do not interfere with reception.
- The unit must be installed in a place where no damage can be produced as a result of water leakage.
- A noise filter must be installed when the power supply emits harmful noise.
- To avoid fire or explosion, do not install the unit in a flammable environment.
- Do not put any objects or tools on top of the indoor unit.

5.1.3 Unpacking

All units are supplied with a wooden base, packed inside a cardboard box and covered with a plastic bag.

For unpacking, first place the unit on the assembly area, as close as possible to its final installation location, to avoid damages during transport. Two persons are required.

1. Cut the strapping bands and remove the adhesive tapes.
2. Remove the cardboard cap and then the plastic bag around the unit. Afterwards, remove the rest of cardboard parts.
3. Lift the YUTAMPO unit from the wooden base and place it carefully on the floor, as near as possible to its final location.

CAUTION

- *Two or more persons are required when lifting because of the heavy weight of the unit (53 or 62 kg, depending of the model).*
- *Be specially careful with the mounting foot once the unit is on the floor. Avoid harsh handling of the unit, as it could cause damage to the foot.*

5.2 REMOVING THE COVERS

Please follow these operations if access to the indoor unit components is required:

1 Unscrew the 2 screws in B and remove the lower part of the front cover.

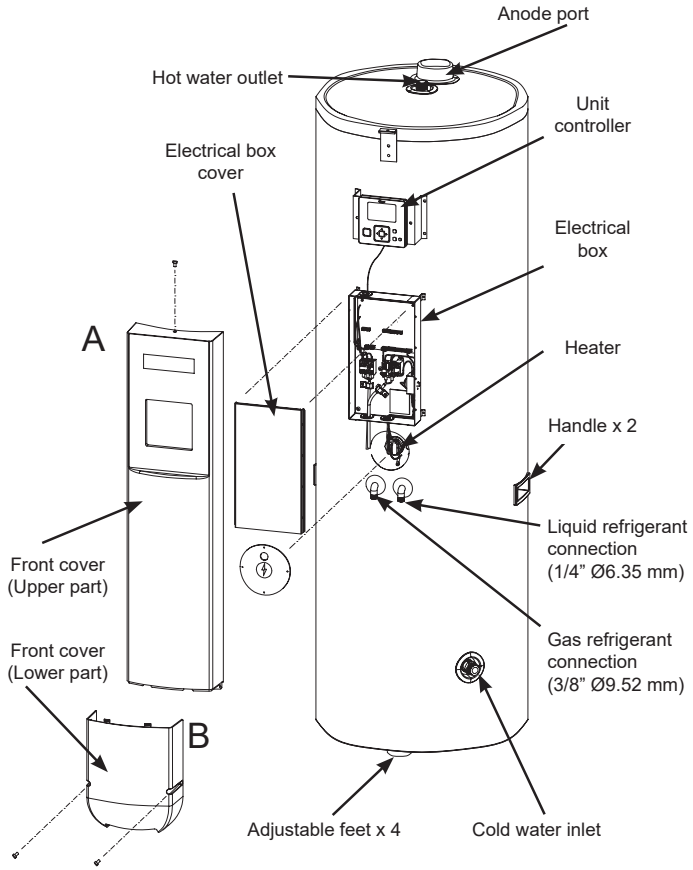
   a. Lean the cover towards yourself.

   b. Push it down.

   c. Detach the cover from the unit.

2 Unscrew the 1 screw at the top and 2 screw at the low in A and remove the upper part of the front cover.

3 Pull the electrical box cover for access to the electrical box.



5.3 INSTALLATION OF INDOOR UNIT

NOTE

Please, try to perform the entire procedure following all the steps in the exact order in which they are presented below.

Installation procedure

1 DHW pipe connection

2 Drain pipe connection

3 Refrigerant piping connection

4 Power and transmission wiring connection

5 Levelling procedure

6 Test and check

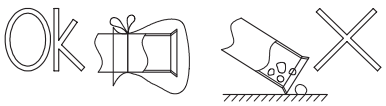
5.3.1 General notes before performing piping work

- Arrange locally-supplied copper pipes.
- Select pipes of the appropriate material, with sufficient thickness to withstand pressure.
- Select clean copper pipes. Make sure that there is no dust or moisture inside the pipes. Blow the inside of the pipes with oxygen-free nitrogen to remove any dust and foreign materials before connecting them.

NOTE

A refrigerant system with no moisture or oil contamination will yield maximum performance and life cycle, whereas a poorly prepared system will not. Take particular care to ensure that all copper piping is clean and dry internally.

- Cap the end of the pipe when it is to be inserted through a wall hole.
- Do not put pipes on the ground directly without a cap or vinyl tape at the end of the pipe.



- If piping installation is not completed until the following day or over a longer period of time, braze off the ends of the piping and charge with oxygen-free nitrogen through a Schrader valve type access fitting to prevent moisture and particle contamination.

- It is advisable to insulate the water pipes, joints and connections in order to avoid heat loss and dew condensation on the surface of the pipes or accidental injuries due to excessive heat on piping surfaces.
- Do not use insulation material that contains NH_3, as it can damage copper pipe material and become a source of future leakage.
- It is recommended to perform a thorough water pipe inspection after completion of piping work to make sure that there is no water leakage in the space heating circuit.

5.3.2 DHW pipe connection

The connection between the DHW installation and the DHW tank must be done taking the following considerations into account:

1 A pressure relief valve (not field supplied) must be installed at the DHW inlet connection (as close as possible to the tank) to provide the following functions:

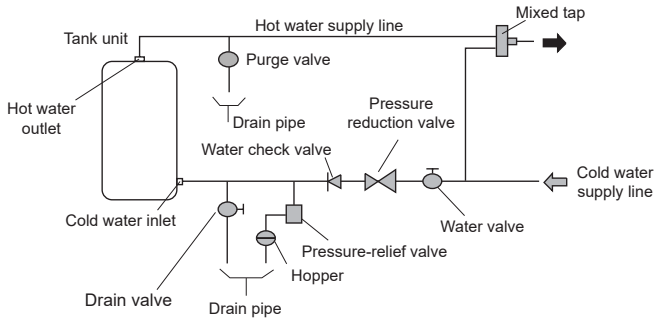
- Pressure protection
- No-return function
- Shut-down valve
- Filling
- Draining

The tank has to be mounted with a pressure relief valve of 3/4" diameter, following standard NF36,40. (This is applicable for France, but local regulations may also apply in other states).

If not, a specific device for each function should be installed.

2 A shut-down valve (field supplied) must also be installed in the DHW system.

Illustrative example:



NOTE

The discharge pipe should always be open to the atmosphere, free of frost and obstruction, and in continuous descending slope in order to let water out in case that a leakage occurs.

5.3.3 Requirements and recommendations for the hydraulic circuit

- When the unit is stopped during shutdown periods and the ambient temperature is very low, the water inside the pipes may freeze, thus damaging the pipes. In these cases, the installer shall ensure that the water temperature inside the pipes does not fall below the freezing point.
- Fresh water must circulate inside the water circuit of the DHW tank at least once every day during the first days after the installation has been performed. Additionally, it is advised to flush the system with fresh water when there is no consumption of DHW during long periods of time.
- If the domestic cold water entry pressure is higher than the equipment's design pressure (6 bar), a pressure reducer must be fitted with a nominal value of 7 bar.
- The installation must satisfy the requirements of applicable legislation in terms of piping connection and materials, hygienic measures and testing, as well as the possible requirements for the use of some specific components such as thermostatic mixing valves, differential pressure overflow valves, etc.

5.3.4 Filling the DWH tank with water

Follow the steps below when starting up the unit for the first time or when it has not been used for an extended period of time

1 Open the outlet water taps of the DHW, to expel all the air from inside the tank.

2 Turn on all the connected mixer taps (hot water side).

3 Open the inlet valve of the DHW tank in order to fill the tank. If there is a shut-down valve installed in the DHW tank outlet, open it to allow circulation through the DHW installation.

4 When water begins to flow from the outlet water taps of the DHW installation, close all these taps.

5 Turn off all the connected mixer taps.

6 Inspection

a. After filling the tank, check all pipe, heater and anode joints and the tank for leakage.

b. Check operation of the pressure relief valve.

c. After heating water for the first time, check water leakage from the pipe, heater and anode joints and the tank once more.

CAUTION

- *Check carefully for leaks in the water circuit, connections and circuit elements.*
- *Check that the water pressure in the circuit is lower than 7 bars.*
- *The recommended standard water quality for the DHW circuit is shown in the table below.*

Parameter	Parameter Value	Unit
pH	6.5 to 8.5	-
Conductivity	10~500	µs/cm
Alkalinity	60~300	mg/l
Total Hardness	6~15	ºfH
	0.6~1.5	mmol/l
	60~150	mg $CaCO_3$ /l
Chlorine	<50	mg Cl^-/l
Sulphate	<50	(mg SO_4^{2-}/l)
Nitrate	<100	mg/l (NO_3)
Iron	<0.2	mg/l (Fe)
TDS (Total dissolved solids)	8~400	ppm
Appearance of the water	Clear and without deposits	-

- *Please install a water softening device when the hardness of water is higher than values shown in the table above.*

5.3.5 Refrigerant piping connection

The connection of refrigerant pipes must be done respecting the considerations indicated in the Installation Manual of the outdoor unit. Flare nuts are used for the connection of refrigerant piping.

Follow the instruction “1) Preparation of Pipe” as indicated in the Installation Manual of the outdoor unit.

1 Use the flare nuts supplied in the accessory bag.

2 Please be careful when bending the copper pipe.

3 Place the flare nuts manually to avoid misalignment. Once the flare nuts have been screwed in, use a torque wrench to tighten the connection.

	Outer diameter of pipe (Ø)	Torque N.m (kgf.cm)
Small diameter side	6.35 (1/4”)	13.7-18.6 (140-190)
Large diameter side	9.52 (3/8”)	34.3-44.1 (350-450)

NOTE

Do not perform connection work with only one wrench. Always use two wrenches (keeping one of them fixed, while using the other to tighten the connection). Refrigerant leakage may occur if the screwing procedure is performed with only one wrench.

4 After having performed the connection of refrigerant piping, seal the open space between the knock-out hole and refrigerant pipes with insulation material.

5 Follow the instruction “3) Remove air from the pipe and gas leakage inspection” as indicated in the installation manual of the outdoor units.

CAUTION

- *Check for refrigerant leakage in detail. If a large refrigerant leakage occurred, it would cause difficulty with breathing. Also, harmful gases would be generated if there was a fire in the room.*
- *If the flare nut is tightened too hard, it may crack over time and cause refrigerant leakage.*

5.4 R32 REFRIGERANT CIRCUIT

5.4.1 Refrigerant piping

◆ Refrigerant piping length between indoor unit and outdoor unit

The unit installation and refrigerant piping should comply with the relevant local and national regulations for the designed refrigerant.

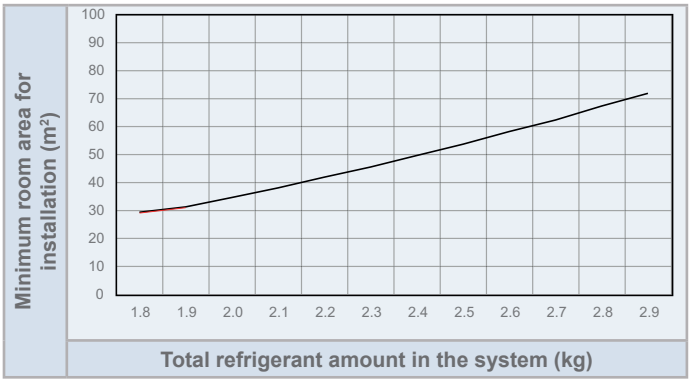
Due to R32 refrigerant and depending on final refrigerant charge amount, a minimum floor area for installation must be considered.

- If total refrigerant charge amount <1.84kg, there are no additional minimum floor area requirements.
- If total refrigerant charge amount ≥1.84kg, there are additional minimum floor area requirements to be checked.

◆ Minimum area requirements

In case of total refrigerant amount ≥1.84 kg, the unit should be installed, operated and stored in a room with a floor area larger than the minimum criteria. Use following graphic and table to determine these minimum criteria:

Refrigerant Amount (kg)	Minimum Area (m^2) (H:0.6m)
1.84	28.81
1.9	30.72
2.0	34.09
2.1	37.50
2.2	41.36
2.3	45.00
2.4	49.09
2.5	53.18
2.6	57.73
2.7	61.82
2.8	66.82
2.9	71.36



NOTE

In case of not achieving the minimum floor area, contact with your dealer.

5.4.2 Refrigerant charge

◆ Refrigerant charge amount

The R32 refrigerant is factory charged in the outdoor unit with a refrigerant charge amount for:

- Outdoor Unit Single: 20 m of piping length between outdoor and indoor unit.
- Outodoor Unit Multi: 30 m of total piping lenght.

NOTE

The minimum piping length is 5 m.

◆ Refrigerant charge before shipment (W_0 (kg))

Outdoor unit model	W_0 (kg)
RAW-35RHC	1.0
RAM-53NYP3E	2.05
RAM-70NYP4E	2.05
RAM-90NYP5E	2.40

NOTE

For further information about refrigerant charge refer to the Outdoor Unit Installation Manual.

6 ELECTRICAL AND CONTROL SETTINGS

6.1 GENERAL CHECK

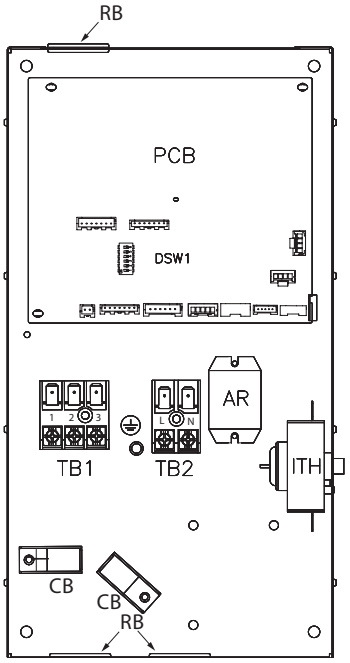
- Make sure that the following conditions related to power supply installation are satisfied:
  - The power capacity of the electrical installation is large enough to support the power demand of the YUTAMPO system (outdoor unit + DHW tank).
  - The power supply voltage is within ±10% of the rated voltage.
  - The impedance of the power supply line is low enough to avoid any voltage drop of more than 15% of the rated voltage.
- The installation must satisfy the following requirements established by the Council Directive 2014/30/EU, relating to electromagnetic compatibility:
  - The status of Harmonics for each model, regarding compliance with EN61000-3-2 is as follows:

Status regarding compliance with EN61000-3-2	Models
Equipment complying with EN61000-3-2	TAW-190RHC TAW-270RHC TAW-(190/270)RHC+RAW-35RHC TAW-(190/270)RHC+RAM-53NYP3E TAW-(190/270)RHC+RAM-70NYP4E TAW-(190/270)RHC+RAM-90NYP5E

  - The table below indicates the Maximum permitted system impedance Z_{max} at the interface point of the user's supply, in accordance with EN61000-3-3 (voltage fluctuations).

Model	Power supply	Z_{max} (Ω)
TAW-190RHC	1~230V 50Hz	-
TAW-270RHC	1~230V 50Hz	-
RAW-35RHC	1~230V 50Hz	-
RAW-35RHC+ TAW-(190/270)RHC	1~230V 50Hz	-

6.2 ELECTRICAL CONTROL BOX

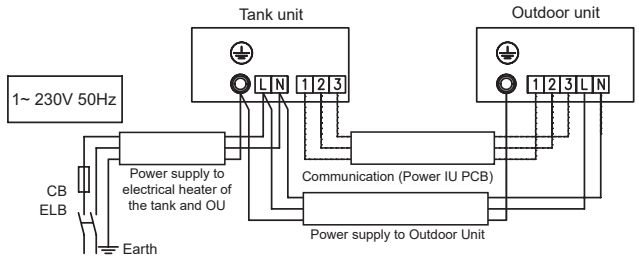


Mark	Part name
PCB	Printed circuit board
DSW1	DIP Switch (factory setting) ON 1 2 3 4 5 6
TB1	Communication terminal board (1-2-3 / Outdoor unit - Tank)
TB2	Power terminal board (L-N: 1~ 230V 50Hz)
AR	Relay
ITH	Thermostat
CB	Cord band
RB	Rubber bushing

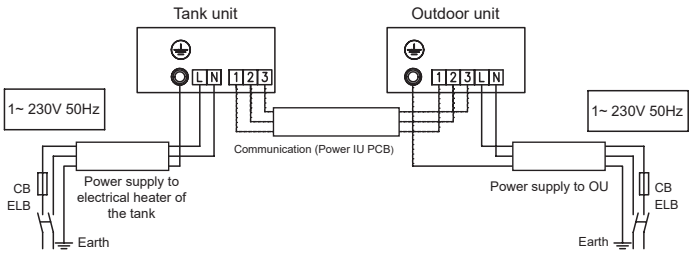
6.3 SYSTEM WIRING DIAGRAM AND TRANSMISSION WIRING BETWEEN OUTDOOR UNITS AND INDOOR UNIT TANK

The units shall be connected according to the following electric diagrams, depending on the applicable powering scheme and according to the local and national regulations:

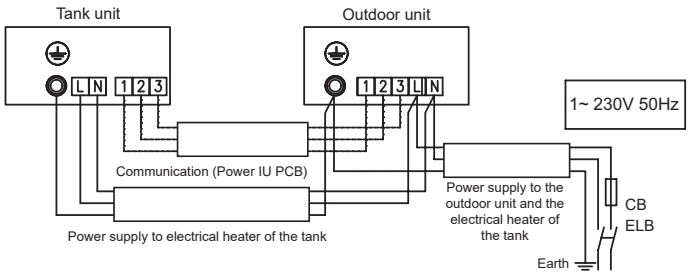
In case of power supply through the tank - only in combination with outdoor units RAW-35RHC and RAW-35NHB



In the case of independent supply to the tank and to the outdoor unit - in combination with outdoor units RAW-35RHC, RAW-35NHB, and RAM-(53/70/90) NYP(3/4/5)E



In case of power supply through the outdoor unit - only in combination with RAW-35HRC and RAW-35NHB



⚠ CAUTION

- *If the electrical heater is not used, the indoor unit must be wired to earth through the outdoor unit (1-2-3 and earth).*
- *Make sure that the transmission wiring is not connected to any live part by mistake, since it could damage the PCB.*
- *These wiring diagrams are for illustrative purposes only. The location of the terminals in the diagrams may differ from the actual location of the terminals in the electrical box.*

6.4 WIRING SIZE AND MINIMUM REQUIREMENTS OF THE PROTECTION DEVICES

⚠ CAUTION

Use wires which are not lighter than the polychloroprene sheathed flexible cord with code designation 60245 IEC 57.

Type of powering scheme	Power supply	Applicable voltage		RNC (A)	IPT (kW)	MC (A)	Max. IPT (kW)	CB (A)	ELB (n/A/ mA)	Section of the power cable (L-N+E)	Section of the connection wires between the tank and the outdoor unit (1-2-3+E)
		U min. (V)	U max. (V)								
Independent supply to the indoor unit (tank TAW-(190/170)RHC)	1~ 230V 50Hz	207	253	7.1	1.64	7.5	1.64	10	2/40/30	1.5 mm^2	1.5 mm^2
Independent supply to the outdoor unit RAW-35RHC	1~ 230V 50Hz	207	253	4.9	1.00	7.9	1.82	10	2/40/30	1.5 mm^2	1.5 mm^2
Common power supply for the indoor (tank) and outdoor units RAW-35RHC+ TAW-(190/270) RHC (Not available in case of combination with outdoor unit RAM-(53/70/90)NYP(3/4/5)E)	1~ 230V 50Hz	207	253	11.7	2.68	15.4	3.46	20	2/40/30	4.0 mm^2	1.5 mm^2

⚠ CAUTION

- *Ensure specifically that there is an earth leakage breaker (ELB) installed for both the outdoor and indoor unit.*
- *If the installation is already fitted with an earth leakage breaker (ELB), ensure that its rated current is large enough to withstand the current of the units (both outdoor and indoor).*
- *Cable size depends on length and wiring system connections between tank and outdoor unit*

NOTE

- *Electric fuses can be used instead of magnetic circuit breakers (CB). In that case, select fuses with rated values similar to those of the CB.*
- *The earth leakage breaker (ELB) mentioned in this manual is also commonly known as residual current device (RCD) or residual current circuit breaker (RCCB).*
- *The circuit breakers (CB) are also known as thermal-magnetic circuit breakers or just magnetic circuit breakers (MCB).*
- *The "Maximum current" shown in the tables is the maximum total running current of the unit under the following condition:*
  - *Power supply voltage: 90 % of the rated voltage.*
- *The power supply cables must be appropriately sized to provide this maximum current value.*
- *Specifications in these tables are subject to change without prior notice in order to let Hitachi offer the latest innovations to its customers.*
- *The abbreviations used in the table stand for the following concepts:*

  U: Power supply

  IPT: Total input power

  STC: Starting current: Less than maximum current

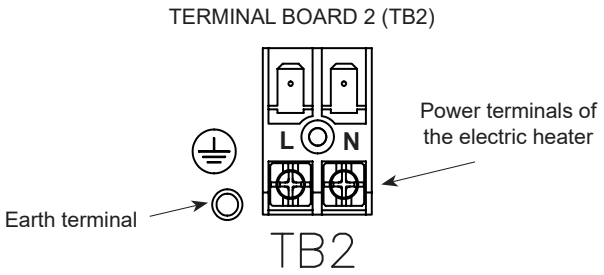
  RNC: Running current

  MC: Maximum current

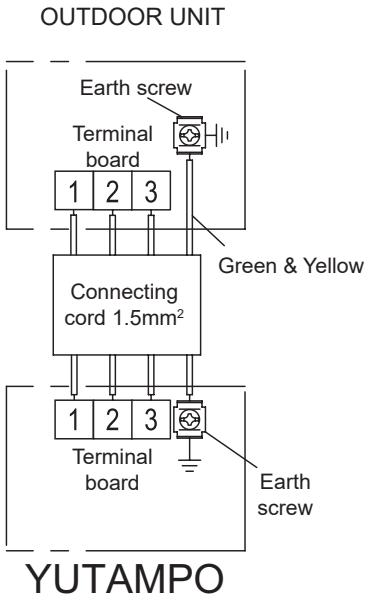
6.4.1 Power and transmission wiring connection procedure

Perform the following steps after having accessed the electrical box:

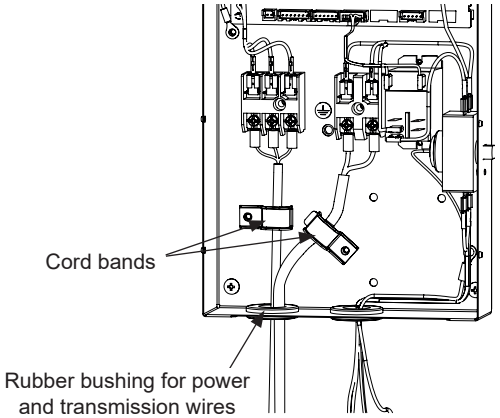
1 Power supply of the electrical heater:



2 Connect the transmission wires between outdoor and indoor unit to the terminals 1, 2 and 3 on the terminal board 1 (TB1).



3 Fix the cables using the cord bands located in the electrical box. Route the cables out through the electrical wiring holes with rubber bushing at the bottom side of the indoor unit.



6.4.2 Levelling procedure

After completing the connections described above, adjust the height of the mounting feet to align the height of the refrigerant piping outlet with that of the connection of the installation.

NOTE

- *This procedure must be done before filling the water tank.*
- *Only adjust those feet in which adjustment is necessary.*
- *Start with all four feet screwed in as far as possible (factory supplied position).*
- *The levelling procedure must be performed by two people.*

7 COMMISSIONING

7.1 PRELIMINARY CHECK

⚠ CAUTION

Do not operate the system until all the check points have been cleared.

Once the installation has been completed, commissioning must be performed according to the following procedure before handing the system over to the customer. Commissioning must be performed methodically, checking that electrical wiring and piping are correctly connected.

Indoor and outdoor units must be configured by the installer to achieve optimal system performance with the most appropriate settings.

7.1.1 Checking the unit

- Check the external appearance of the unit to look for any damage that might have been caused during installation.
- Check that all the covers are fully closed.
- Check that the unit has been correctly installed and that the mounting feet are correctly adjusted.

7.1.2 Electrical checking

- Check to ensure that the electrical resistance is more than 1 MΩ, by measuring the resistance between ground and the electrical parts terminal. If the measured resistance value is lower than that, do not operate the system until the electrical leakage is found and repaired. Do not apply voltage on the terminals for transmission and sensors.
- Check that the power supply voltage is within ±10% of the rated voltage.
- Check that field-supplied electrical components (main switches, breakers, wires, conduit connectors and wire terminals) have been properly selected according to the electrical specifications given in this document, and check that the components comply with international and domestic standards.
- Wait for at least three minutes after having turned the main switch OFF before touching any electrical components.
- Check to ensure that the electrical wiring of the indoor unit and the outdoor unit are connected as shown in the chapter.
- Check to ensure that the external wiring is correctly fixed, to prevent problems such as abnormal vibration and noise, or damage to wiring due to contact with the plates.

7.1.3 Checking the hydraulic circuit (DHW)

- Check that the circuit has been properly flushed and filled with water and that the installation has been drained.
- The pressure of the DHW circuit in the tank has to be lower than 7 bars.
- Check for any leakage in the water cycle. Pay special attention to the water piping, heater and anode connections.
- Make sure that the internal water volume of the DHW tank is correct.
- Check that the valves of the hydraulic circuit are fully open.

7.1.4 Checking the refrigerant circuit

- Check to ensure that the stop valves on the gas and liquid lines are fully open.
- Check that the size of the piping and the refrigerant charge comply with the applicable recommendations.
- Check the inside of the unit for refrigerant leakage. Contact your dealer in case that there is a refrigerant leakage.

7.2 COMMISSIONING PROCEDURE

This procedure applies regardless of the options installed on the module.

- When installation is complete and all necessary settings have been performed, close the electrical box and place the cabinet as shown in the manual.
- Start up the setup wizard from the unit controller.
- Select the “Domestic hot water temperature” settings.
- Start the unit by pressing the Run/Stop button.

8 MAINTENANCE

8.1 REGULAR INSPECTION AND MAINTENANCE

Unit maintenance

Wipe the unit using a dry cloth or a cloth dampened with a solution of kitchen detergent and water.

NOTE

- *Do not use benzine, thinner, scouring powder or the like, as they may damage the paint and plastic components.*

Water leakage inspection

When the tank has been filled, check if the leak water receiver is full, or if other parts are leaking water.

8.2 YEARLY INSPECTION AND MAINTENANCE

Operation inspection of circuit breaker

Check the operation of the circuit breaker (CB) and the earth leakage breaker (ELB).

Inspection of ground connection

Check that the unit is properly connected to ground.

Inspection of the outdoor mounting frame

Check that the unit is firmly mounted and the mounting frame is steady.

⚠ DANGER

Check whether the mounting frame is rusty and the outdoor unit is no longer in a horizontal position Poor installation conditions may cause the outdoor unit to tip over or fall, resulting in personal injury.

Inspection of the outdoor unit

Inspection of installation status

- Check that the evaporator is clean and clear of external elements that might impede the passage of air.
- Check drain pan is clean and clear of external elements that might prevent drainage.
- Check that the fan propeller rotates correctly and that there is no damage to the surface or edges.

Regular inspection and maintenance of the hot water tank

Inspection of installation status

- Check for water leaks from pipe joints.
- Check the electrical insulation.
- Check the piping insulation.

Functional inspection

- Check the pressure-relief valve for water leaks.
  - The pressure relief must be operated regularly in order to remove the scale deposit and to check whether it is clogged.
- Check the electric heater connections.
- Check the pressure reducing valves and auto purge valve of the water installation.
  - Pressure reducing valves of the water installation, pressure relief valves and auto purge valves wear out quickly. The quality of the water used may make it necessary to replace those often. Replace all parts which should be replaced according to the results of inspections.

In heavy snowfall regions

When the outdoor unit is installed in a heavy snowfall region, the necessary actions must be take to prevent the air inlets or outlets from becoming blocked by snow, as it may lead to a drop of heating capacity, and eventually to breakdown of the unit.

8.3 WHEN THE UNIT WILL NOT BE USED FOR AN EXTENDED PERIOD

When the unit will not be used for a month or more

- Turn the circuit breaker off.
- Drain the water inside the tank. Follow the instructions in the section “Preparing for operation” when using the tank again at a later point.

When the unit will not be used for a short period of less than a month

- Turn the circuit breaker off.
- Close the water valve. Refill the tank when using the tank again at a later point.

Draining procedure

- Turn the circuit breaker off.
- Close all the mixer taps.
- Open the hot water knobs of all the connected mixer taps.
- Open the drain valve (Once the draining starts, it may take 20 to 30 minutes until completion).
- Close the drain and hot water knobs of all the connected mixer taps.

9 TROUBLESHOOTING

9.1 OPERATION

Condition	Check the following
Unit is not operating	Check whether a power outage has occurred, a fuse is blown or the breaker has tripped.
	Check whether the timer has been set and if it has been correctly set.
The water does not become hot or it takes a time for it to heat up	Check whether the water temperature is correctly set.
	Check whether the air outlet or air inlet of the outdoor unit has been blocked.
	Check whether the unit is leaking water.
The water tank does not exceed 55ºC but is set to a higher temperature	Check that the heater has power.
	Push the safety thermostat reset switch and check that the heater has power.
Water comes out of the outdoor unit	The outdoor unit discharges water during defrosting. In a cold area, this water could freeze so the water outlet on the outdoor unit must not be blocked.
	When the outdoor unit is installed overhead, use a bush to connect a drain pipe to the water outlet to arrange proper discharge.
Water comes out of the tank unit	When the temperature of incoming water is very low and the atmosphere around the tank is very humid, dew may form on the surface of the metal or piping and may drop.
Steam is coming out of the outdoor unit	This is steam generated by frost melting during defrosting in the outdoor unit.
No hot water	Check if a water outage has occurred. Turn the breaker off and close the water heater and water valve during a water outage.
Water is coming out of the safety pressure relief valve (field supplied)	During heating operation, water leakage is normal. The water in the tank is expanding from being heated and about 3% of the tank capacity is discharged.
The timer cannot be set	Check whether the unit has been set to off-peak power supply. The timer will not work when the unit is set to off-peak power supply.

If the unit still fails to operate normally after carrying out the inspections in the Troubleshooting section, close the water heater shut-off valve and turn the breaker off before calling your sales agent. Inform your agent of the model of your unit, its production number and date of installation. Please also provide your sales agent with an explanation of the failure, considering the following symptoms:

- Breakers trip and fuses blow frequently.
- Foreign matter or water have spilled accidentally inside the unit.
- Cables are hot or the wire coating is damaged.
- The control panel displays error codes.
- There is water in the leak water receiver in the hot water tank.
- The heat exchanger in the hot water tank has failed.
- Water is leaking from the tank or from pipes (The hot water tank unit is not operating normally).
- Water output is poor (The outdoor unit is not operating normally).
- The strainer in the pressure reducing valves of the water installation has become clogged.

NOTE

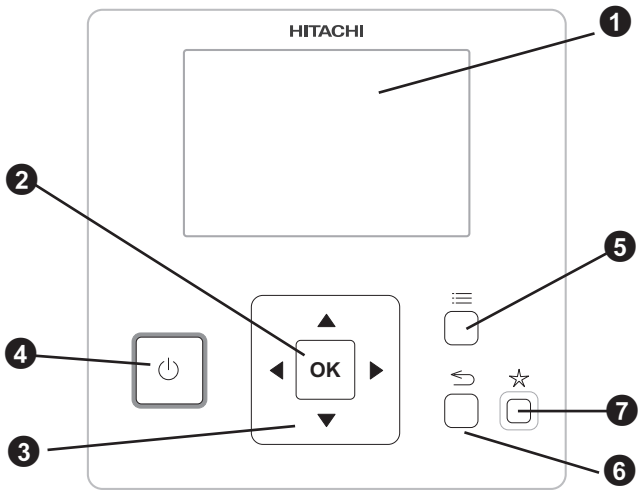
In particular when the room lights are dimmed, a slight fluctuation of brightness in lighting may occur upon starting of heating operation. This is of no consequence. The conditions of power supply established by the local power supply companies are to be observed.

10 OPERATION - UNIT CONTROLLER

The time required to reach the set water temperature depends on factors such as the temperature of water supply, the temperature inside the tank or the outdoor air temperature.

The electric heater is automatically set to hot in case that heating up the water would take more than eight hours due to low water and outdoor air temperatures.

10.1 DEFINITION OF THE SWITCHES



❶ LCD screen

❷ OK button

It is used to select the parameters to adjust and to confirm the selected values.

❸ Arrow key

It is used to navigate through the menus and screens.

❹ Run/Stop button

- NO LIGHT: Manual OFF state
- RED: OFF state due to an alarm
- GREEN: ON state
- YELLOW: OFF state due to the timer

❺ Menu button

It is used to display the different configuration options of the controller.

❻ Return button

It is used to return to the previous screen.

❼ Favourite button

It is used as a shortcut to execute the preset favourite action (Timer, Night shift or DHW) directly.

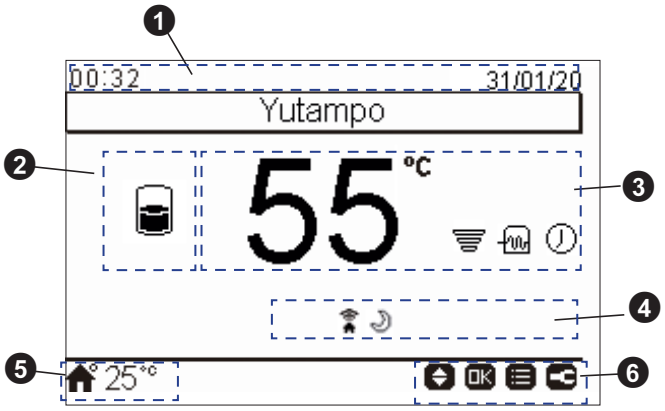
10.2 DESCRIPTION OF THE ICONS

10.2.1 Common icons

Icon	Name	Values	Explanation
	State of DHW heating operation		DHW is ready (Thermo-OFF).
			DHW is being heated up (Thermo-ON).
		OFF	DHW heating operation has been stopped by unit controller button or by timer.
	Progress of DHW heating operation		DHW heating operation has reached 0 < X < 70% of the selected water outlet temperature.
			DHW heating operation has reached 70% ≤ X < 80% of the selected water outlet temperature.
			DHW heating operation has reached 80% ≤ X < 90% of the selected water outlet temperature.
			DHW heating operation has reached ≥ 90% of the selected water outlet temperature.
88	Setting temperature	Value	Setting temperature of DHW heating operation
	Alarm		There is an alarm. The alarm code is shown next to this icon.
	Timer		Simple timer
			Weekly timer
	Derogation		The current operation settings have been manually modified with respect to those of the active timer program.
	Installer mode		The unit controller is in installer mode, which has special privileges.
	Menu lock		The menu is being blocked from a central control. This icon disappears when indoor communication is interrupted.
	Outdoor air temperature		The outdoor air temperature is indicated next to this icon.
	DHW Heater		The DHW Heater is in operation.
	Defrost		Defrost function is active.
	Control mode (Local/Full)	-	Operation in local control mode when no icon is displayed
			Operation in central control mode
	Forced OFF		This icon is displayed under each setting item turned to OFF, in case that the forced OFF input is configured and its signal is received.
ANTI LEG	Anti-legionella operation	ANTI LEG	Anti-legionella operation is active
	DHW boost operation		DHW boost operation is active.
	Night shift		Informs about night shift operation

10.3 MAIN SCREEN

10.3.1 Comprehensive view



1 Time and date

2 State of DHW heating operation (OFF, Thermo-ON/OFF)

3 DHW control

This part of the screen is used for the indication of the setting temperature for DHW and a throughput icon indicating the progress of DHW heating operation. It can also show icons indicating the operation of the auxiliary DHW electrical heater, the activation of timer programs and the operation of DHW boost, in case that these options are enabled.

The setting temperature can be modified using the arrow key when in this view. The following quick actions are shown when pressing the OK button:

- Timer: Menu for the selection and configuration of simple timer and schedule timer.
- Status: Display of information related to current operation conditions.
- DHW Boost: Activation of the auxiliary DHW heater, to speed up DHW heating operation.

4 Unit status icons

This part of the screen is used for the display of notification icons related to general status and operation conditions of the unit, including icons such as Central operation, Night shift or Compressor.

5 Outdoor temperature / Alarm indication

In normal operation, the outdoor air temperature is displayed next to the home-shaped icon.

In abnormal operation, the alarm icon is indicated together with the corresponding alarm code.

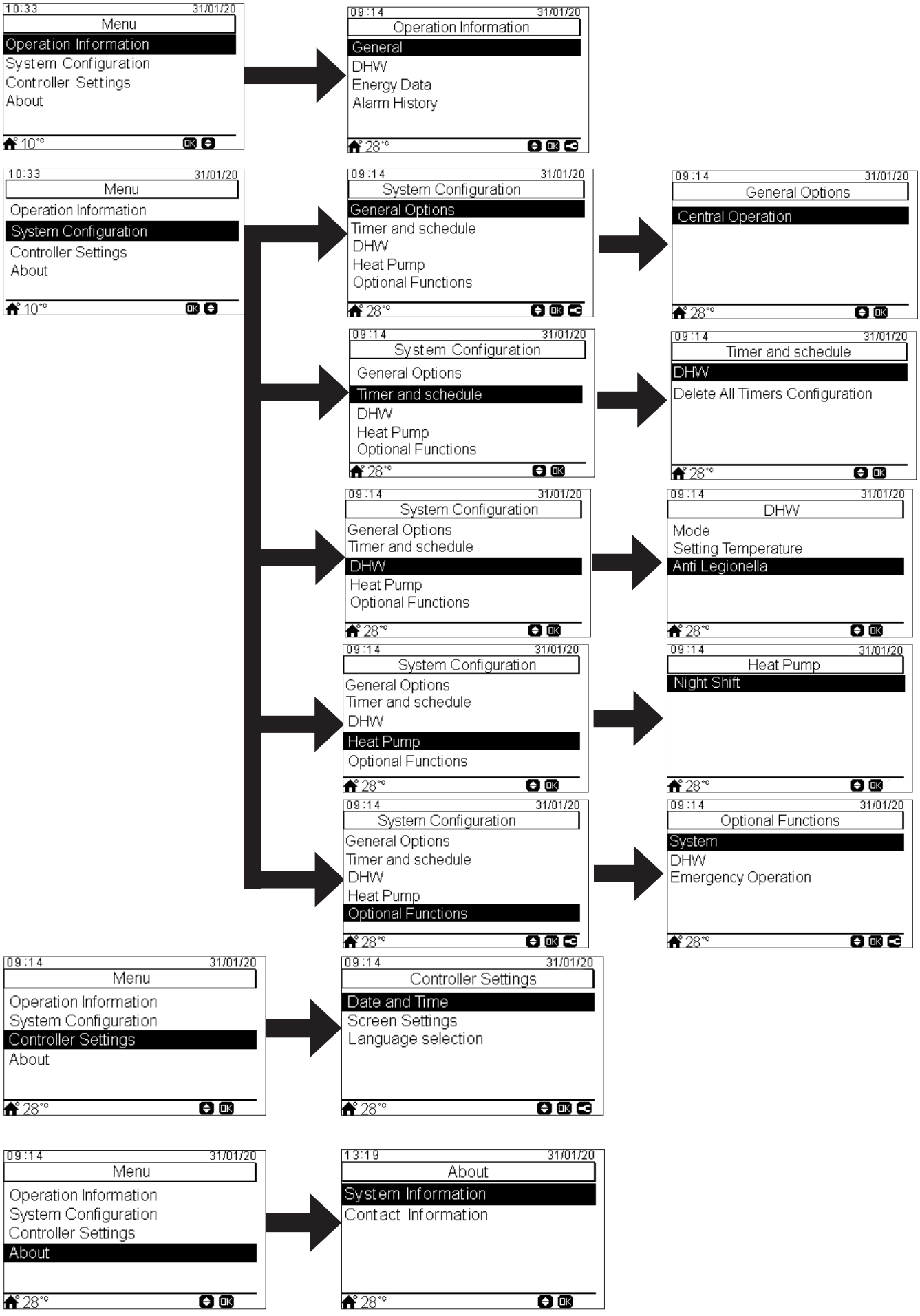
As a protective measure for the system, the YUTAMPO unit will force OFF state in case the outdoor ambient temperature is out of its operating range (between -15°C and 37°C) and it required compressor to start. The outdoor ambient temperature indicated on the LCD controller will blink, indicating this situation.

6 Available buttons / Installer mode

This part of the screen is used to indicate the buttons of the unit controller which can be used at the moment.

When the Installer mode is enabled, its icon appears at the right end of this bar.

10.3.2 User Menu



10.4 CONTENTS

Menu Contents			
Level 1	Level 2	Level 3	Level 4
Operation Information			
	General		
	DHW		
	Heat Pump Details		
	Energy data		
	Alarm History		
System Configuration			
	General Options		
		Central Operation	
		H-LINK Address	
	Timer and Schedule		
		DHW	
		Delete All Timer Configuration	
	DHW		
		DHW Heater	
		Anti Legionella	
	Heat Pump		
		Night Shift	
	Optional Functions		
		System	
			Energy Configuration
			Smart Function
		DHW	
			Circuit Pump
			DHW Boost
		Emergency Operation	
			Mode
			Operation
	I/O		
		Inputs	
		Outputs	
Controller Settings			
	Controller Options		
	Date and Time		
		Adjust Date and Time	
		European Summer Time	
		UTC Zone	
	Screen settings		
	Language selection		
Commissioning			
	Pump Down Procedure		
		Start Pump Down	
About			
	System Information		
	Contact Information		
Factory Reset (*)			
Return to user mode			

◆ Installer mode

The icon indicates that the menu is only available to the Installer, a special user with higher access privileges to configure the system. In order to access the controller as the Installer, the "OK" and "⮌" buttons must be pressed for 3 seconds.

OK	+	⮌

After that, the "Enter password" message is displayed.

The login password for the Installer is:

Right ▶, Down ▼, Left ◀, Right ▶

Password entry is confirmed by pressing the "OK" button.

If the correct password is entered, the installer mode icon appears on the notification bar (bottom line).

Installer mode icon	

After 30 minutes of inactivity, it is necessary to repeat the log in process. To exit the installer mode and return to the unit menu, hold down the "⮌" button for 3 seconds or go to the "Return to user mode" on the main menu.

NOTE

- *The following chapters explain the special settings the professional installer can edit. It is important to understand that the professional installer can also perform all the actions available to the typical user.*
- *(*) It is advised to turn the power supply off and on again once after performing factory reset, in order to ensure that every setting is restored to its default value.*

10.5 MENU NAVIGATION

In order to access to the main menu, press "☰" the button.

Description	Default value	Range	Steps	Unit	Description
Operation Information					
Operation Information – DHW					
Operation	-	Demand ON/OFF	-	-	
Current Temperature	-	-	-	ºC	
Setting Temperature	-	-	-	ºC	
El. Heater Status	-	Enabled/Disabled	-	-	
El. Heater Op	-	Demand ON/OFF	-	-	
Legionella Status	-	Enabled/Disabled	-	-	
Legionella Op.	-	Demand ON/OFF	-	-	
Operation Information - Heat Pump Details					
Outdoor Ambient T	-	-	-	ºC	
Discharge Gas T	-	-	-	ºC	
Evaporation Gas T	-	-	-	ºC	
Inverter Op. Freq.	-	-	-	Hz	
Defrosting	-	-	-	-	
Compressor Curr.	-	-	-	A	
Unit capacity	-	-	-	HP	
Unit Type	Yutampo	-	-	-	
Operation Information - Energy data					
Operation Information - Energy data - Input Power					
DHW	-	-	-	kWh	
Total	-	-	-	kWh	
Operation Information - Alarm History					
System Configuration					
System Configuration –General Options					
System Configuration –General Options - Central Operation					
Control Type	Local	Local/Full	-	-	In case that the Yutampo unit is connected a central operation device (KNX,Modbus, etc.) Local: Central orders are disabled Full: Central orders are enabled
System Configuration – General Options - H-LINK Address					
Refrigerant Cycle Address	0	0 ~ 63	1	-	H-LINK communication addresses must be assigned in case that the Yutampo unit is connected to a central operation device (Default values: 0:0)
Indoor Unit Address	0	0 ~ 63	1	-	
System Configuration - Timer and Schedule					
System Configuration - Timer and Schedule - DHW					
Timer Type	Disabled	Disabled Simple Timer Schedule	-	-	
Timer configuration	-	-	-	-	
Frequency	Never Once Everyday Weekend Workday	-	-	○	
Starting time	06:00	00:00 to Stopping – 00:10	ºC	00:10	
Setting Temperature	-	-	ºC	1	
Stopping time	12:00	Starting +00:10 to 24:00	-	00:10	
Reset configuration	-	-	-	-	

Description	Default value	Range	Steps	Unit	Description
System Configuration – DHW					
Mode	Standard	Standard / High Demand	-	-	There are two operation modes: Standard: DHW heating operation starts when the temperature of the water in the tank is low enough to start up the heat pump. DHW is always heated up with the heat pump. High Demand: DHW heating operation starts if the differential is larger than differential temperature. DHW can be heated up using the heater, the heat pump or a combination of both.
Control	High efficiency	High efficiency / High Speed	-	-	There are two tank heat up controls: High Efficiency: Compressor operation is adjusted to optimal efficiency for lower power consumption. High Speed: The heat pump is switched to maximum operation capacity to heat up the tank in the shortest time.
Setting Temperature	45	30 ~ (Maximum setting T)	1	ºC	Setting for domestic hot water temperature selected by the user. The maximum value of this setting depends on the Maximum Setting T set by the installer.
Maximum Setting T	55	40~55 (*)	1	ºC	Maximum value of DHW setting temperature permitted by the installer. (*) When “Electric Heater” is enabled the maximum setting temperature is 75ºC.
Differential T	6	2~15	1	ºC	Hysteresis of heater operation in High Demand mode.
HP ON Differential T	10	5~30	1	ºC	Hysteresis for the start of DHW heating operation with the heat pump
System Configuration – DHW – DHW Anti Legionella					
Status	Disabled	Disabled / Enabled	-	-	Status of anti-legionella operation (enabled/ disabled)
Operation Day	Sunday	Daily / Mon ~ Sun	-	day	Specified day for anti-legionella operation
Starting Time	1:00	(00:00~ 23:50)	0:10	time	Specified time of the day for anti-legionella operation
Setting Temperature	50	50~75	-	ºC	Setting for domestic hot water temperature in anti-legionella operation.
Duration	10	10~60	-	min	Duration of shock treatment
System Configuration – DHW – DHW Heater					
Electrical Heater	Disabled	Disabled / Enabled	-	-	Status of electrical heater operation (enabled/ disabled)
El. Heater Wait. Time	45	OFF- 5~40	5	min	Waiting time for the beginning of electrical heater operation since compressor start-up (High speed mode only)
				-	There is no waiting time in case that it is set to OFF.

Description	Default value	Range	Steps	Unit	Description
System Configuration – DHW – Combination Priorities					
Type	Water	Water / Mixed / Air	-	-	In case priority “Type” is set to “Water”, system gives priority to Yutampo operation. Air to Air operation is not allowed during Yutampo heating-up process by means HP operation. In case priority “Type” is set to “Air”, system gives priority to Air to Air operation. Yutampo operation is never performed in case there is at least one Air to Air unit switched ON. In case priority “Type” is set to “Mixed”, system allows mixed, alternate, operation between Air to Air units and Yutampo Unit.
Maximum Time	Enabled	Disabled / Enabled	1	-	This setting can be only edited in case “Type” is set to “Mixed”: This option is allowed in case of High Speed selected. In case of disabled, Yutampo performs operation until Setting point is reached. In case of enabled Yutampo operation is performed until Setting point is reached or until Maximum Operation Time is finished. Note that in case Yutampo operation stops due to Maximum Operation Time, electric heater shall start in order to continue heating-up process until setting is reached.
Maximum Operation Time	0:40	00:10 ~08:00	0:10	-	This setting can be only edited in case “Type” is set to “Mixed”: This option is allowed in case “Maximum Time” is set to enabled. During this time HP is dedicated to Yutampo and Air to Air units do not provide heating or cooling operation. It is recommended to not decrease this time in order to reach setting temperature by means single compressor operation in one heating-up process.
Cycle Time	1	1~24	1	hour	This setting can be only edited in case “Type” is set to “Mixed”: Minimum time between 2 consecutive heating up process. HP operation will start for Yutampo when water conditions allows HP to start but never before “Cycle Time” has passed.
NOTE: Special functions such as High Demand, Anti-legionella and Boost operation are considered top priority. Compressor operation for Air to Air units may stop if it is required by any of previous operations.					
System Configuration – Heat Pump					
System Configuration – Heat Pump – Night Shift					
Capacity	75	40~100	1	%	Ratio of reduction in heat pump capacity
Status	Disabled	Disabled / Enabled	1	-	Status of activation of Night Shift (reduction of compressor load in order to reduce operation noise during the night hours)
Starting time	20:00	00:00 ~23:50	0:10	time	Starting time of Night Shift operation
Stopping time	8:00	00:00 ~23:50	0:10	time	Ending time of Night Shift operation
System Configuration – Optional functions					
System Configuration – Optional functions – System – Energy Configuration					
Status	Disabled	Disabled / Enabled	-	-	Power meter data control is the measuring of the real power consumption. It can be done by outdoor unit estimation, or connecting an external power meter.
Power meter 1	Disabled	Disabled 0.1 1 10 100 1000	-	pulse/ kWh	Number of pulses per kWh of the power meter. This parameter must be adjusted when connecting an external power meter.

Description	Default value	Range	Steps	Unit	Description
System Configuration – Optional functions – System – Smart Function					
Status	Disabled	Disabled / Enabled	-	-	Status of activation of Smart Function (blocking/ limitation of heat pump operation, or increase of demand depending on the availability of electrical power)
Smart Action	HP block	HP Block Sm. Grid Ready	-	-	Setting of the action when Smart Function is enabled: HP Block: Heat Pump is forbidden in any condition. Sm. Grid Ready: Smart Grid Ready operation. Refer to the Service manual for more information.
Trigger Type	Closed	Closed (NO) Open (NC)	-	-	Selection of the type of trigger for Smart Function: Closed: Action when input is closed Open: Action when input is open
System Configuration – Optional functions –DHW					
System Configuration – Optional functions –DHW – Circuit Pump					
Circuit Pump	Disabled	Disabled Enabled Anti Legionella Timer	-	-	Status of activation of the water pump for the re-circulation of the hot water from the DHW tank by means of the heat pump. This function can also be used together with the anti-legionella protection function.
System Configuration – Optional functions –DHW – DHW Boost					
Trigger Type	Push	Push Open (NC) Closed (NO)	-	-	Status of activation of DHW Boost (request to speed up the production of DHW by means of forced activation of the electrical heater)
Boost setting	55	Max Installer	-	ºC	Setting for domestic hot water temperature in boost operation. The maximum value of this setting depends on the Maximum Setting T set by the installer.
System Configuration – Optional functions –Emergency Operation					
Emergency Mode	Manual	Manual/ Automatic	-	-	It is possible to switch to emergency operation by means of the electrical heater, in case of malfunction of the outdoor unit. It can be done in either of the following modes: Manual: The electrical heater is switched ON manually by the user Automatic: The electrical heater is switched ON automatically in case of malfunction of the outdoor unit.
Emergency Operation	Off	Off / On	-	-	Status of electrical heater operation in manual emergency operation: ON: Heater switched ON OFF: Heater switched OFF.

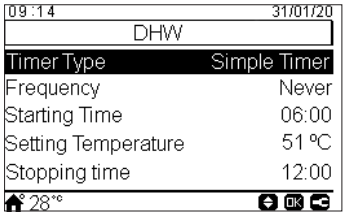
Description	Default value	Range	Steps	Unit	Description
System Configuration – I/O					
System Configuration – I/O – Inputs					
Input 1	Disabled	-	-	-	The input functions are available when using the ATW-OFC-02 accessory. The Yutampo unit has 3 inputs that can be configured according to customer needs: Smart Act / SG 1: This function is used to block or limit the power consumption of the heat pump when restrictions in power supply must be observed. When using a Smart Grid Ready application, this input is used as a digital input 2, allowing four different operating modes: DHW Boost: Manual request for immediate DHW heating operation Power Meter 1: Input used as kW/h pulse count for the monitoring of energy data Forced OFF: Forced OFF operation of the unit. The remote control switch can still be used, but it will show an indication that operation is forbidden. SG 2: When using a Smart Grid Ready application, this input is used as a digital input 2, allowing four different operating modes.
Input 2	Disabled	-	-	-	
Input 3	Disabled	-	-	-	
System Configuration – I/O – Outputs					
Output 1	Disabled	-	-	-	The output functions are available when using the ATW-OFC-02 accessory. The Yutampo unit has 4 outputs that can be configured according to customer needs: Alarm: Output when an “Alarm Code” is received from the indoor or outdoor units. Operation: Output when the tank is in DHW heating operation. Defrost: Output when the operation state of the outdoor unit is defrosting. DHW Re-circulation: Output when the re-circulation pump for the DHW tank is enabled.
Output 2	Disabled	-	-	-	
Output 3	Disabled	-	-	-	
Output 4	Disabled	-	-	-	
Controller Settings					
Controller Settings – Language selection					
Language selection	English	English Español Français Italiano Deutsch Slovensko Português Dansk Nederlands Swedish Suomi Ελληνικά Hrvatski	-	-	Setting of the language used in the LCD screen
Controller Settings – Controller Options					
Favourite Action	DHW Boost	Timer Night shift DHW Boost	-	-	Setting of the function of the “Favourite” button on the unit controller: Timer: Creation of a timer program. Night shift: Launch of Night Mode operation DHW Boost: Launch of tank heat up operation

Description	Default value	Range	Steps	Unit	Description
Controller Settings – Date and time					
Adjust Date and Time	-	-	-	-	Adjustment of date and time for the unit controller.
European Summer Time	Disabled	Enabled / disabled	-	-	Setting of automatic switching to European Summer Time, and the corresponding UTC zone in case that automatic switching to European Summer Time is enabled.
UTC Zone	0	0 ~ 12	-	-	
Controller Settings – Screen Settings					
Brightness	5	0 - 6	1	-	Setting of brightness of the LCD screen
Backlight Time	15	0 - 30	1	sec	Setting of back-light time of the LCD screen
Contrast	17	0 - 30	1	-	Setting of contrast of the LCD screen
ON LED Bright	15	0 - 15	1	-	Setting of the brightness of the ON LED
Commissioning					
Commissioning – Pump Down Procedure					Setting and execution of pump down operation, in case that it is required during commissioning
Duration	0:10	00:10 ~00:30	0:10	min	
Start Pump Down	-	-	-	-	
About					
About - System information					
Unit Type	-	Yutampo			
Unit Capacity	-	-	-	HP	
Controller Firmware	-	-	-	-	
Indoor PCB Firmware	-	-	-	-	
Language package	-	-	-	-	
About - Contact information					
Name	Hitachi	-	-	-	
Phone Number	-	-	-	-	
Factory reset					
Return to user mode					

11 TIMER OPERATION

The unit controller must be set to the correct date and time before using the timer function.

The timer function allows the selection of simple and scheduled timers, as shown in the figures below:



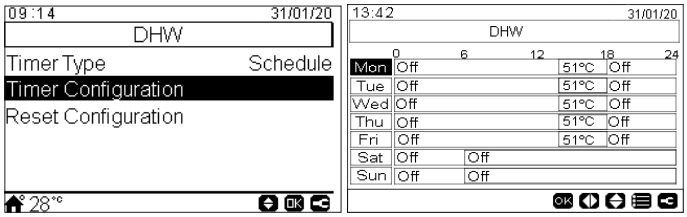
11.5.1 Setting of Simple timer

The following parameters can be adjusted:

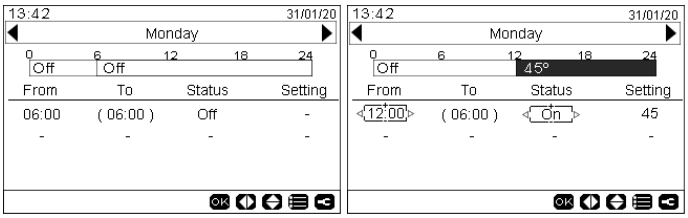
- Frequency (Never / Once / Everyday / Weekend / Work day)
- Starting Time: From 00:00 to 24:00
- Setting Temperature: From 30ºC to 75ºC
- Stopping time: From 00:00 to 24:00

11.5.2 Setting of Schedule timer

Pressing the OK key with “Timer Configuration” being selected displays the detailed schedule screen. The active schedule timers are shown in a weekly calendar.



Up to five timer events can be defined for each weekday, and these can be used for turning the DHW heating operation on or off, or to change the setting temperature for the DHW tank. Pressing the OK key with one of the weekdays being selected in the weekly calendar screen displays the detailed schedule for the weekday. The following parameters can be adjusted for each program within the day:



- From: Starting time (the selected Status remains valid until the time shown between brackets in the “To” column)
- Status: (On / Off)
- Setting: Setting temperature for the DHW tank (From 30ºC to 75ºC)

Pressing the “Menu” button during the edition of the timer events for a given weekday displays a menu to copy the daily pattern to other weekdays or to suppress the selected timer event.

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PMML0544 rev.4 - 02/2023

Printed in Spain